

Foreword



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**Chair of the Board of Directors, and
President of the Institute for Global Environmental Strategies**

In the First Phase, IGES, which was established in April 1998, conducted policy proposing strategic research under six themes: Climate Change, Urban Environmental Management, Forest Conservation, Environmental Education, Environmental Governance, and New Development Patterns. The First Phase ended in March 2001, and the Second Phase of project research began in April 2001.

The research of the First Phase began with literal "searches" by newly employed research and clerical staff members. In spite of the fact that IGES was aiming to become an international research institute, its name was not yet known in the world. Therefore, one of the first activities of IGES had to be the building of international networks. Even concerning the content of research, a common understanding of "what is strategic research" had to be achieved, to begin with, among researchers of differing disciplines. Despite all this, IGES was able to make achievements during its three years in the First Phase, owing to appropriate guidance given by experienced directors and trustees, and efforts made by all IGES staff members. The achievements include inauguration of its journal "International Review for Environmental Strategies (IRES)", and publication of numerous reports, three books in English and three others in Japanese. Moreover, a research report was published by each of the six projects at the end of the First Phase. During the First Phase, the Technical Support Unit of the Intergovernmental Panel of Climate Change was established within IGES in July of 1999, and the IGES Kitakyushu office was established, with support from the Kitakyushu Government, in October of the same year.

As stated above, I believe IGES was successful in making achievements beyond expectations in the First Phase, even though it was a period of foundation building. This is also shown in evaluations conducted by external organizations.

In designing projects for the Second Phase, which was to start in FY2001, discussions based on draft plans presented by each project were held by members of the Research Advisory Group and Program Planning Group, consisting of directors, trustees, and external specialists. As a result, five projects (Climate Policy, Urban Environmental Management, Forest Conservation, Environmental Education, Long-Term Perspective and Policy Integration), and the Capacity Building Program were started. Regarding the content, even the projects that retained their names from the First Phase now employ more advanced research methodology or targets,

based on the results of the First Phase.

This annual report covers FY2001, which was the first year of the Second Phase. The real value of research at IGES will become apparent in the Second Phase. Although IGES is becoming better known internationally through its hosting of and participation in several international workshops and conferences, it is from here on out that the quality of research at IGES will be put to the test. As part of an effort to share problems with all research staff at the beginning of the Second Phase, IGES decided to hold seminars for all its members regularly from the beginning of FY2001. In the seminars, critical analysis is made of the themes, compositions, analysis methods, data, and the ways conclusions are drawn in environmental reports issued by UN related organizations and other overseas research institutes. The number of research staff increased in the Second Phase. Some members left IGES, and new members were also employed. FY2001 may be considered as a run-up period for the launch of full-scale research activities. In order to digest the results of the First Phase and to produce new research results, all members of a research project should join in the discussions about the approach to issues, re-examination of methodologies, and selection of data. Through these discussions, each member can be expected to find his/her own direction of research. In addition to the five projects mentioned above, Kansai Research Center was established in Kobe in June 2001, with support from the Hyogo Prefectural Government. It was at this center that the project on Business and the Environment was launched. In the IGES Headquarters in Hayama, the construction has started, with full support from the Kanagawa Prefectural Government, of a new research facility which is a 7,400 m² building built on land over 20,000m². The facility is expected to complete in June 2002.

Not only the quality of research needs to improve, but also other issues remaining from the First Phase, such as the further internationalization of IGES, have to be dealt with in the Second Phase. Research activities at IGES, which have been advancing smoothly up to now, have to be advanced still further, and we should make even more efforts in order to open up prospects for sustainable development in the future.

A handwritten signature in dark ink, appearing to read 'Akio Morishima'.

IGES Annual Report FY2001

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1 Outline of IGES



1 Outline of IGES

Goal

Established in 1998, the Institute for Global Environmental Strategies (IGES) is an independent, not for profit think tank, based in Japan, that goes beyond research to provide practical ways to protect the earth's environment and to realize greater sustainability and equity in the global community. While the outlook of IGES is global, the principal geographical scope of its activities is Asia and the Pacific region, an area which is experiencing rapid economic development and which will affect the global environment through its population growth, urban environmental problems and other environmental

issues.

The IGES mission is to move human society to become more environmentally and socio-economically sustainable.

In order to realize sustainable development, our current socio-economic activities themselves should be reviewed and redirected. Thus, the ultimate goal of IGES is to create a new paradigm for the global community so that the unsustainable production and consumption patterns currently observed can be changed into sustainable ones.

Four Functions

IGES activities comprise four components:

- ◆ Strategic Research
- ◆ Information Outreach
- ◆ Multi-stakeholder Dialogue
- ◆ Capacity Building

Strategic Research

IGES works to carry out policy oriented research and provide innovative and practical proposals for policy and institutional changes that will foster an environmentally sound and socially equitable society. IGES seeks greater participation by major groups from civil society in conducting its research activities.

Information Outreach

Objective information moves people to change their behavior. Therefore, IGES disseminates its scientific achievements and trends on international and regional debate regarding sustainable development-related issues through various media including the IGES website, and e-mailed E-alerts. IGES has been actively working to introduce major policy trends in the region, particularly in non-English speaking countries.

Multi-stakeholder Dialogue

IGES is a think tank that goes beyond research. In order to realize a sustainable human society, IGES not only provides the results of its strategic research for policy decisions but also facilitates multi-stakeholder dialogue on various issues that constitute major threats to global society, such as climate change.

Capacity-building

Because people are empowered by skills and knowledge, IGES develops and offers an eLearning System, an on-line training course, for training environmental specialists in developing countries. IGES also supports training programs by other organizations such as UNITAR (the United Nations Institute for Training and Research) and LEAD (the Leadership for Environment and Development).



Milestones

January 1995

Establishment of IGES recommended by the Japanese Prime Minister's Ad Hoc Commission on Global Environment in the Twenty-First Century

April 1996

Final report on functions, organizational structure and other aspects of IGES issued by the Discussion Group on Comprehensive Environmental Studies and Education (Environment Agency of Japan)

January 1997

The Selection Committee decided that IGES should be located in Shonan Village Center, Kanagawa Prefecture

April 1997

Establishment of a Preparatory Organization to Establish IGES

December 1997

Ceremony for Adoption of the Charter for the Establishment of IGES

March 1998

Establishment of IGES as a non-profit corporation

April 1998

Start of the First Phase Strategic Research

July 1999

Establishment of the Technical Support Unit (TSU) of the IPCC National Greenhouse Gas Inventories Programme at IGES*

October 1999

Establishment of IGES Kitakyushu Office

February 2001

Establishment of a special account for the Internet Global Environmental Fund**

April 2001

Start of the Second Phase Strategic Research

June 2001

Establishment of Kansai Research Center

* Holds expert meetings and compiles reports and guidelines to technically support the activities of the Task Force Bureau (TFB) on National Greenhouse Gas Inventories, which was set up by the Intergovernmental Panel on Climate Change (IPCC).

* * Conducts research for building systems using the Internet, for the purpose of supporting global environmental conservation activities performed by NGOs around the world.

2 IGES Activities in Fiscal Year 2001



2 IGES Activities in Fiscal Year 2001

I . Summary

FY2001 was the first year of Second Phase Strategic Research (FY2001-FY2003). During the year, IGES conducted evaluation of the research results of the First Phase. At the same time, IGES organized its projects for the purpose of carrying out research that may be directly linked to practical and problem-solving style policy proposals, based on the Second Phase Strategic Research Program, which was produced in FY2000. After the organization of projects, IGES began strategic research activities, making use of research results that were accumulated during the First Phase, and also intellectual properties gained through research networks. The Kansai Research Center has been established to conduct research into business and the environment, new research and secretariat members have been recruited, and a new research building whose construction started in May 2001 has been completed. Moreover, other activities toward implementation of research results in the First Phase have been initiated.

Furthermore, programs on a Communication strategy and Capacity Building that saw preparatory activities in the First Phase have now been commenced on a full-scale basis.

Of the two activities for which special accounts were set up, the administration of the Technical Support Unit (TSU) for the IPCC-NGGIP has started to develop Good Practice Guidelines for Land Use, Land Use Change and Forestry. As for the administration of the Internet Global Environmental Fund, IGES has launched the development of a website to support NGOs that are conducting environmental activities.

In addition, a plan for further internationalization of IGES will be examined internally, and there will be discussions by the board members based on the results of the assessment.

1. Outline of the Second Phase Strategic Research Program and Evaluation of the First Phase Research Results

The draft of the Second Phase Strategic Research Program was examined by the Program Planning Group

(PPG), consisting of members of the Boards of Directors and Trustees, and by the Advisory group of the Chair of the Board of Directors, consisting mainly of the Japanese Board members. Based on these examinations, the draft plan was approved at the Ninth Meeting of the Board of Directors, which was held in February 2001.

The Second Phase Strategic Research Plan is based upon the following three principles. 1) Utilization of research results and experiences from the First Phase. 2) Conducting of research linked to more practical and problem-solving type of policy proposals that meet the current needs. 3) Cooperation among research projects. The four projects from the First Phase were continued in the Second Phase to improve and expand their research contents. Climate Policy, Urban Environmental Management, Forest Conservation, and Environmental Education. There were two additional projects. One was the Long-Term Perspectives and Policy Integration Project, which integrates the New Development Patterns Project and the Environmental Governance Project of the First Phase. Another project was the Business and the Environment Project, which was started in the newly established Kansai Research Center. Overall, there were a total of six projects. In addition, projects on Information Technology and the Environment and on Environmental Industries in Developing Countries were launched as sub-projects of the Long-Term Perspective and Policy Integration project. Moreover, preparations for initiating a project on Freshwater Resources Management in Asia were carried out.

In formulating these concrete research programs, points including the following four were considered. 1) Compilation of the Environmental White Paper for Sustainable Development in Asia and the Pacific (IGES White Paper). 2) Contributions to the World Summit on Sustainable Development. 3) Expansion of disseminating function of environmental information. 4) Further internationalization of IGES.

Regarding the evaluation of the First Phase, methodology and results of strategic research were evaluated externally such as by members of the Research Adviso-

ry Committee who were appointed by the signatory organizations of the IGES charter, members of international organizations, officers in charge of environmental administration related matters in national governments, members of environmental organizations, and members of NGOs. After the evaluation, the Comprehensive Report of First Phase Strategic Research was compiled. As a result, the result of the strategic research of the First Phase was evaluated highly as a basis for the Second Phase. However, the need for the following points were emphasized: execution of adequate policy analysis, cooperation with policy makers, submission of comprehensive research results produced by more networking of the projects, submission of policies that correspond to needs, submission of research results that may link to strategies, and reinforcement of networking with research institutes and NGOs in Asia.

In response to these points that were pointed out in the evaluation, IGES hopes to make more effective policy proposals for the realization of sustainable development in the Second Phase. At the same time, IGES hopes to improve its international research networks in order to promote its further internationalization. In promoting internationalization, in particular, IGES examined the vision of the organization and an activity plan for becoming a further internationalized organization. In addition, IGES has been making efforts to raise its profile internationally by actively making suggestions to international agencies and at international conferences, and to be evaluated highly as an international research institute by promoting research cooperation with foreign research institutes.

2. Research Activities of Research Projects

Regarding the Second Phase Strategic Research, IGES started six projects, taking into account the research results of the First Phase: Climate Policy, Urban Environmental Management, Forest Conservation, Environmental Education, Business and the Environment, and Long-Term Perspectives and Policy Integration. Among these projects, the newly-started Long-term Perspective and Policy Integration Research focuses on the points of convergence of each project, and seeks to bring together crosscutting themes in a unified and integrated way.

1) Climate Policy Project

IGES changed the name of the Climate Change Project of the First Phase to Climate Policy Project in the Second Phase. In order to offer innovative climate change measures to policy makers as concrete proposals, focusing on international measures to deal with climate change, the Climate Policy Project continued to conduct research on both domestic and international climate policies to be implemented, including the expansion of research collaboration networks. In FY 2001, the project focused especially on establishing infrastructures necessary for conducting research. For example, compiling and disseminating necessary information, model building and database construction were some of the main activities in this fiscal year.

Designing effective domestic policy measures to contribute to the goals of the Kyoto Protocol was one of the main research activities, including effective measures for climate change mitigation from the aspect of the industry and business sectors. Another important activity was the formulation of effective mechanisms for enhancing international cooperation among developed and developing countries, particularly in the Asian region. The empirical application of IGEM was extended to India and Russia. For example, in the case of India, basic information collection and model building was established, but work in Russia was behind schedule, mainly due to delays in data collection. Because the introduction of the Clean Development Mechanism (CDM) is essential in facilitating private sector investments in climate-friendlier projects in developing countries, research on related issues, including the design of the CDM, its potential and constraints from various viewpoints, and paths to the construction of more effective financial mechanisms, were examined. The research results were presented at several regional and international workshops and seminars, and discussed actively with experts and policy-makers in the region.

2) Urban Environmental Management Project

In the Second Phase, the project aims to clarify the process of urban environmental changes through comparison between cities, using methods such as case studies. It also aims to establish comprehensive

strategies for urban environmental management. In particular, it will contribute to the improvement of urban environmental management in Asia by supporting the Kitakyushu Initiative of UN/ESCAP, whose purpose is to exchange information and build networks for urban environmental management.

In January 2002, IGES organized a workshop and an international symposium entitled "Policy Integration & Industrial Transformation towards Sustainable Urban Energy Use for Cities in Asia" in Kitakyushu. These conferences were financially supported by organizations such as Asia Pacific Network for Global Change Research (APN), and were attended by researchers and representatives from international organizations and cities that support the Kitakyushu Initiative. Through this process, a network has been established for reflecting research results to the policy making process, and for implementing such policies, in cities in Asia.

In support of the implementation of the Kitakyushu Initiative, a city network was developed comprised of core members from 20 local governments in 13 countries, and the "First Meeting of the Kitakyushu Initiative Network" was held. At this meeting, reports on successful and transferable experiences in urban environmental management were introduced along with proposals for pilot activities. Criteria for the assessment of urban environmental policies, as well as criteria for quantitative indicators that are useful for local level activities, were developed in various research fields. These were based on research on existing indicators to assess environmental improvement. Support for pilot activities, as well as promotion of inter-city cooperation and capacity building were developed using the outcomes of these activities and research.

3) Forest Conservation Project

The goal of the FC project in the second phase is to present concrete strategies to promote residents participation in forest management. For this purpose, the project decided to provide guidelines and policy recommendations for ensuring the participation of local people in our target countries (Indonesia, Laos P.D.R. and Russia's Far East).

In FY 2001, FC concluded Memorandums of Under-

standing with counterparts in the target countries in order to conduct joint research with them. Then, several meetings were organized in order to elaborate the goals of the second phase and framework of local and international approaches with collaborators and supporters in target countries. Participatory Action Research was conducted in several research sites in the target countries and the legal system relating to forest management, timber industry and forest certification was analysed. Moreover, FC tried to gather information on international conferences on forest management and international treaties were analysed in terms of participation of local people. Based on these activities, the first local guidelines and policy recommendations were elaborated.

4) Environmental Education Project

The Second Phase Strategic Research Program for this project is to carry out practical research, taking into account both practice and research. In FY2001, the project focused on developing environmental education materials, organizing activities in human resource development and developing innovative eco-tourism education models. Under the activity developing environmental education materials, the Project drafted educational materials on the environment, which presents information on climate change and its impact. The targets of this material are high-school students in both developed and developing countries. This material is being evaluated in India. In addition, the Project collected information on pioneering examples of environmental education. Its objective was to understand the present tendencies of environmental education in the region. As part of activities on 'organizing human resource development,' the Project implemented a training course for Indonesian NGO staff in environmental education as a task commissioned by JICA. Five trainees from Indonesia took part in the training course. Also, some research was conducted regarding the scheme "Period of Integrated Studies" which was introduced from FY2002 based on the educational policy of the Japanese Government. On eco-tourism, the Project has already conducted field research in some advanced sites of eco-tourism. Besides these activities, the Project also undertook

studies in Northeast Asian countries in order to assist the activities of the Tripartite Environmental Education Network (TEEN). The results of this research have already been included in the FY 2001 interim report of the Project.

5) Business and the Environment Project

This project, which was initiated at the Kansai Research Center in the Second Phase, aims to promote the greening of corporate management by developing three sorts of measures: environmental accounting, environmental disclosure and environmental valuation. Furthermore it intends to propose an innovative socio-economic system supporting environmental friendly corporate activities. In FY 2001, the first year of the project, the current situation in these three areas of the business sector in Japan was thoroughly examined in order to point out problems and directions for improvements. Regarding environmental accounting, environmental accounting information disclosed in corporate environmental reports was analysed and a questionnaire survey for Japanese corporations was conducted. As a result, it was found that the external functions of environmental accounting were highly developed, but the internal functions had not been improved. A study group with several Japanese companies was launched in order to investigate the practical problems of environmental accounting. As to environmental disclosure, the current status of Japanese corporate environmental disclosure by environmental reports was thoroughly examined. In addition, the comparability of environmental reports, which is one of the most critical issues in this area, was studied and the direction of improvements for higher comparability was investigated. Concerning environmental valuation, almost all prior literature in Japan was examined in order to construct a database. In order to compensate for the insufficiency of those previous studies, as well as improve the quality of the database, a positive test (a pre-test) of environmental valuation was conducted.

6) Long-Term Perspective and Policy Integration Project

This project began second phase activities with the

aim of studying measures and making policy proposals to address environmental problems through a crosscutting approach with a long-term view in close cooperation with other IGES project teams. In particular, LTP focused on a) cross-sectoral policy analysis with long-term perspectives, b) policy analysis contributing to international dialogue on sustainable development in the Asia-Pacific region, and c) policy analysis of pressing issues commonly observed in the region.

In FY 2001, LTP a) organized a series of IGES-wide study sessions participated in by all IGES researchers to analyse environmental reports issued by various global environmental institutes in preparation for the "Environmental White Paper for Sustainable Development in the Asia-Pacific Region (IGES White Paper)," which will be compiled in 2004; b) finalized the ECO ASIA Long-term Perspective Project (LTPP) and published a final report of LTPP; c) prepared for the launch of the "Asia-Pacific Environmental Innovation Project (APEIS)," a successor project of LTPP, and d) provided research results and assisted the organization of meetings of the "Asia-Pacific Forum of Environment and Development (APFED)," where IGES serves as the secretariat. APFED was suggested by the Ministry of the Environment of Japan and is conducted in cooperation with UNEP/ ESCAP.

In addition, LTP carried out studies with regard to "Information Technology Revolution and the Environment" and reviewed the implementation of Agenda 21 in the North-east Asia as a contribution to the preparation for WSSD.

Preparatory work for starting a sub-project of Environmental Industries in Developing Countries and a project of Freshwater Resources Management were conducted.

Future Tasks for the Second Phase

The main project activities in the FY2002 will be the APEIS/RISPO and the APFED, and the interim report for these will be presented at the WSSD supplementary events. Research preparation for a new project, Freshwater Resources Project, will also be conducted.

3. Activities of IPCC/TSU

The Technical Support Unit (TSU) of the IPCC Nation-

al Greenhouse Gas Inventories Programme (NGGIP), hosted by the IGES, was launched under the guidance of the IPCC Inventory Task Force Bureau (TFB), in preparation for work on Good Practice Guidance for Land Use, Land Use Change and Forestry Sector (LULUCF) in 2001. It organized Informal Consultations on LULUCF in March 2001 and an Expert Group Planning Meeting in August 2001 to advance the work. The results of the meeting and relevant TFB meetings was presented at IPCC 18 in September 2001. The progress in the task was reported at UNFCCC SBSTA15 and COP7, in November 2001. The authors for the work were selected at the TFB and IPCC Bureau meetings in December 2001. In March 2002, TSU organized the First Authors/Experts meeting on LULUCF Good Practice at Eisenach, Germany.

TSU is also working on a project to establish a web-based greenhouse gas emission factors database. It organized its First Expert Meeting in July 2001. It has facilitated database development with a "developer" since October 2001. The prototype of the database was made available for pilot testing in January 2002.

In addition to the above activities, TSU also prepares reports and participates in the regular monthly meetings of IGES. In February 2002, the TSU joined a seminar for developing country experts to lecture on GHG inventory at the request of the Ministry of the Environment and Japan International Cooperation Agency. Other activities of TSU include participation in local and international workshops and meetings of relevance to its inventory work.

4. Activities Aiming at Implementation of Research Results

Achievements in the First Phase as well as the research plan and efforts of researchers in the Second Phase need to be publicized. For this purpose, IGES submitted a final report to the Tenth Environment Congress for Asia and the Pacific (ECO ASIA 2001) and distributed its research results to the participants of the Seventh Conference of the Parties to the United Nations Framework Convention on Climate Change (COP7). As a supplementary event at COP7, IGES held a seminar on Climate Policy Dialogue in Asia.

Being assigned to act as the Secretariat of the newly established Asia-Pacific Forum for Environment and

Development (APFED), IGES also presented part of its research achievements to APFED conferences. In May 2002, APFED compiled urgent proposals on themes that include Freshwater Resources for WSSD at the Environment and Development Second Substantive Meeting in May, and the proposal was presented at WSSD. IGES was responsible for its compilation and presentation.

Aiming to achieve research results, the projects of IGES held workshops on policy studies and proposals at home and abroad. One of those was the Open Forum for Global Warming Abatement, which was held six times in Tokyo and Osaka by the Climate Policy project to provide opportunities for a variety of interested individuals to freely join in domestic system review discussions for the promotion of policy formulations concerning the Kyoto Protocol.

In addition, IGES provided occasions for discussions on environmental issues targeted at various participants. For instance, the Global Environment Facility (GEF) and IGES co-hosted a symposium on the financing mechanisms for sustainable development in developing countries, and under commission from the Toyota Motor Corporation, IGES conducted a stakeholder dialogue on the means to achieve a sustainable society.

5. Capacity Building for Global Environmental Specialists

IGES examined the effectiveness of the e-Learning system, which is an original online training system developed by IGES. IGES improved the system after the effectiveness of training courses on environmental management was tested in collaboration with the Kanagawa Prefectural Government. IGES also developed contents of the training courses being provided through the system, and brought 28 to completion in the FY2001. As part of the activities to publicize the e-Learning system, IGES made a presentation at e-Learning WORLD 2001, held at Tokyo Big Sight.

At the same time, IGES jointly hosted capacity building workshops with other organizations. One of these was a workshop on leadership for sustainability, held jointly with LEAD (Leadership for Environment and Development) in April 2001. Based on an agreement with LEAD, the IGES Capacity Building Program accepted interns, including one from Russia. Moreover, IGES

accepted researchers from research organizations around the world, especially in Asia, as a part of its human resources training. In FY 2001, a researcher came from the Tata Energy Research Institute in India, and from the Wuppertal Institute for Climate, Environment and Energy in Germany.

Through the Eco-Frontier Fellowship Program of the Ministry of the Environment of Japan, a researcher from Cambodia came to IGES and was engaged in research activities at IGES.

6. Dissemination of IGES Research Results and Information on Global Environmental Issues

At the same time as providing current IGES activities and research achievements, the latest information concerning political and research trends in relation to global environmental issues were analysed and processed for easier understanding, and were disseminated throughout the world via a variety of media. For this purpose, IGES set up an in-house Public Relations Committee and established a system to issue newsletters and other publications, based on the communication strategy indicated in the Second Phase Strategic Research Program.

7. Promoting Organization of New Research Facilities

With support from the Kanagawa Prefectural Government, the new IGES research facility has been constructed in Hayama in Kanagawa prefecture. IGES examined ways of reducing the environmental load of the facility. IGES opened the Kansai Research Center in Kobe City, Hyogo prefecture in June 2001. The Business and the Environment Project started to conduct its research at this center.

8. Other Activities

1) Affiliate Membership

IGES invites affiliate members on a priority basis to symposia and seminars hosted or jointly hosted by IGES. This is to provide latest information and research results of IGES concerning global environmental problems. IGES also holds seminars for its affiliate members. In FY2001, IGES held three to four seminars, each targeting the general public, governments, and private companies. Roles to be played by each of these groups were discussed in the seminars.

IGES also twice held symposia to consider global environmental problems on a comprehensive basis.

2) Cooperation with the Community

The headquarters and other offices and research centers of IGES collaborate with their local communities, and contribute to these communities. IGES holds various symposia and seminars locally. The Shonan headquarters in Kanagawa prefecture co-hosted a seminar with the Kanagawa Foundation for Academic and Cultural Exchange (K-FACE). The Kitakyushu Office supports the Kitakyushu Initiative for a Clean Environment.

3) Implementation of the IGES Environmental Management System

Environmental management is carried out according to the IGES Environmental Management System established in FY 1998. IGES has pledged to decrease the target amount of electricity and gasoline consumed and the target number of photocopies made per person by five percent from the FY 1999 level by the end of FY 2002.

In FY 2001, the target figures for the number of photocopies made and the amount of gasoline consumed were reached one year ahead of schedule. The amount of electricity consumed decreased by 1.6 percent from the previous year and 3.7 percent from FY 1999. In FY2002, it is expected that the targets will be adjusted due to the move to the new research facility.

4) Internet Global Environmental Fund

This project is designed to support NGOs engaged in environment conservation activities in developing countries through the Internet. In FY2001, IGES performed the following activities with the aim of opening a web site in FY2002. Activities conducted included examination of basic plans concerning the structure of a web site and required systems, writing of web contents explaining global environmental problems, listing of main environmental NGOs in Asia for the purpose of selecting NGOs to be included on the website, and examination of an online payment system that may be used for raising funds for NGOs introduced on the website.

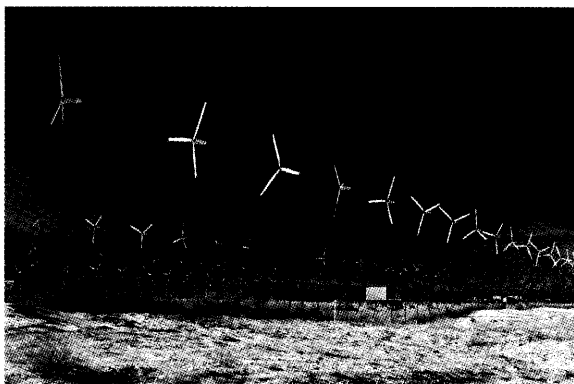
II . Research Results of Research Projects

CP

A. Climate Policy Project (CP)

1. Outline of Second Phase Program

The Climate Policy Project will focus on designing and proposing both international and domestic policy measures, synchronizing with the development of the international negotiations (such as the UNFCCC/COP) in the field of Climate Change. The reader might well be aware that, at COP7, Marrakech, Annex I and Non-Annex I countries agreed to the Kyoto Protocol. Now, Annex I countries are in the stage of implementing Greenhouse Gas Emission Reduction. Hence, the research themes will be: 1) domestic measures to mitigate global warming, including integration of policies, 2) international cooperative mechanisms among the developed and developing countries, and 3) GHG emissions/sink inventory methods. Especially, research will focus on these points: Designing effective international mechanisms (Kyoto Mechanisms) for enhancing international cooperation among developed and developing countries. In this year, we will provide some quantified results on the effect of international mechanisms. Proposals will be made for of the best policy mix for domestic policies in countries including Japan, which combines carbon tax, domestic emissions trading, and other voluntary action plans, so that the Kyoto Protocol may be fully operational. In addition, development of inventory methods, on which GHG emissions/sink inventories of Asian countries will be based, will be undertaken in collaboration with IPCC/TSU as in last year.



2. Research Results of FY 2001

The climate policy project continued to conduct researches on both domestic and international climate policies to be implemented, including the expansion of research collaboration networks. Especially, in the fiscal year 2001, our project focused to establish necessary infrastructures, which were quite necessary to conduct the researches. For example, compiling necessary information and dissemination, model building, database construction were the main activities in this fiscal year.

Effective domestic policy measures to contribute to the goals of the Kyoto Protocol comprised one of our main research themes, including effective measures for climate change mitigation from the aspect of industry and business sectors. Designing effective mechanisms for enhancing international cooperation among developed and developing countries, especially in the Asian region, were another important activity of this fiscal year. The empirical application of IGEM was extended to India and Russia. For example, for the case of India, basic information collection and model structure was established.

In order to reduce GHG emissions in developing countries in the Asian region, which are expected to grow rapidly, large amounts of financial assistance are needed from developed countries in the near future. So far, assistance for climate change mitigation has come mainly from public financing. Despite some efforts, little

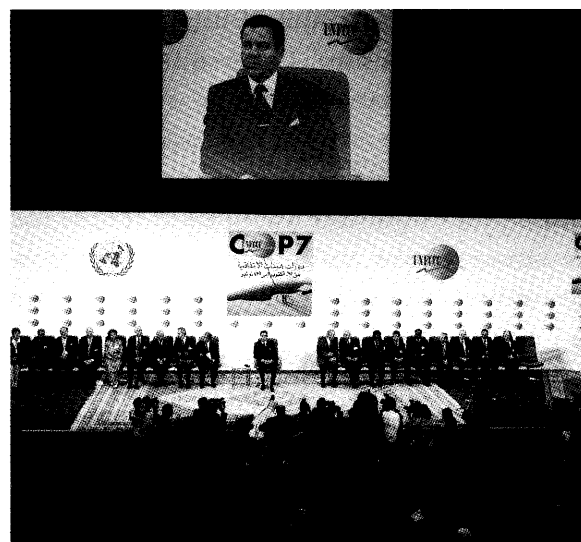


progress has been made in investments in so-called climate-friendly projects that generally entail higher risks and higher initial costs than conventional projects. Under these circumstances, the introduction of the CDM is expected to facilitate private sector investments in climate-friendlier projects in developing countries. In this sense, research on the related issues, including the design of the CDM, its potential and constraints from various viewpoints, and a way forward to the construction of more effective financial mechanisms were examined. The research results were presented at several regional and international workshops and seminars, and discussed actively with experts and policy-makers in the region.

3. Future Task

The issue of climate change will remain one of the major and urgent tasks of environmental policy. The most immediate task of the FCCC is to continue negotiation toward the first commitment period that is 2008-2012, in order to realize the enforcement of the Kyoto Protocol at an early stage. Therefore, the entire framework of international cooperative mechanisms could not be decided at COP 7. Discussions regarding the detailed rules of the international cooperation still continue after COP 7.

National debate on emissions reduction policies, including those in local communities, is already ongoing in each country. The controversy lies in the balance between the economic policy for the industrial sector and forecasting of the international agreement made at COP 7. The discussions on the international framework convention at COP 7 included the issue of consistency between domestic reduction efforts and international measures. As the domestic reduction policies become more concrete, units for accounting for carbon emissions and sinks will be set. As a result, it will be essential for business sectors to conduct management based on the idea of a carbon economy.



COP7 (Marrakech, Morocco, November 2001)

1. Outline of the Project

In the second phase, research activities are focused on the following themes. Theme 1 is focusing on theorizing the causal relationship between development and urban environmental problems. Theme 2 focuses on the quantitative analysis and simulation of policy impacts. Theme 3 is focusing on the case study and local practice.

1) Study on the Process Dynamics of Urban Environmental Evolution

This study aims to develop a theoretical framework for analyzing the process dynamics of urban environmental transformation by examining the processes Asian cities are undergoing with respect to economic, social, and other aspects.

2) Study on the control of energy demand and greenhouse gas emissions in mega-cities

This study aims to develop a simulation model to quantify the impact of policies for macro-economic, transportation, residential & commercial waste management, and urban planning, in order to explore the possible policy integration to maximize the positive effect of each sectoral policy. The scope of this study will be expanded to medium-sized cities in future.

3) Support for the implementation of the Kitakyushu Initiative for Clean Environment

The Kitakyushu Initiative for a Clean Environment was adopted at the 4th Ministerial Conference on Environment and Development organized by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), which was held in Kitakyushu, Japan in September 2000. At the request of ESCAP and the Government of Japan, the IGES Kitakyushu Office provides support for the implementation of the Kitakyushu Initiative, including management of a network of local governments to promote intercity cooperation and transfer of successful practices, collection and analysis of successful practices in urban environmental management, and recommendations for

indicators to monitor the progress of environmental improvement policies.

2. 2001 Activity Report

The results of the activities in FY 2001 was compiled and presented to the urban policy makers, international agencies and academic researchers in the international workshop and symposium held in January 2002, Kitakyushu City. The workshop and symposium, entitled as "Policy Integration & Industrial Transformation towards Sustainable Urban Energy Use for Cities in Asia" welcomed more than 80 participants from around the world, and received supplementary funding support from organizations such as APN (Asia Pacific Network for Global Change Research), START (Global Change System for Analysis, Research and Training) and UNEP-IETC (United Nations Environmental Programme / International Environmental Technology Center), and AEON foundation. The presentation of the research results made by the IGES in-house researchers and the other leading edge international researchers generated active discussion and many new personal ties and networks were established among them. These networks will also be a useful channel for disseminating the research results of the project to policy makers and the other groups working in this field.

In support of the implementation of the Kitakyushu Ini-



Pilot activity in Nakhon Ratchasima/Korat (Thailand)

tiative, the "First Meeting of the Kitakyushu Initiative Network" was held on November 20-21, 2001, and a network of local governments was created, comprised of core members from 20 cities in 13 countries. At this Meeting, reports on successful and transferable experiences in urban environmental management, as well as proposals for pilot activities, were introduced. Research was conducted on criteria for the assessment of urban environmental policies, as well as quantitative indicators that are instrumental for local level activities, based on research of existing indicators to assess environmental improvement. Support for pilot activities, as well as promotion of inter-city cooperation and capacity building, was carried out using the results of this activity and research.

3. Theme in the Second Phase

1) Study on the Process Dynamics of Urban Environmental Evolution

Due to the temporary absence of the researcher in charge, not much progress has been made in the FY2001. From this fiscal year, the actual research work will be launched.

2) Study on the control of energy demand and greenhouse gas emissions in mega-cities

Efforts in data collection in the last year have

revealed the difficulty of obtaining some of the data to be factored into the sub sector model as variables. In the face of the data constraints, each model will be modified according to the available data and some of incomplete time-series data will be estimated from existing data.

3) Support for the implementation of the Kitakyushu Initiative for a Clean Environment

Together with the expansion of network activities, the creation of a support system of intercity cooperation with the participation of national governments, donor organizations, and businesses is a major theme.



View from Pudong district

1. Outlines of the Second Phase Research Plan

The goal of the forest conservation project is to develop strategy for desirable forest conservation and sustainable forest management. Although many approaches should be taken into consideration to achieve this goal, the project sets three objectives for the second phase, as follows:

- 1) The main objective is to develop local guidelines for participation in forest management at the local level. Principal users of the local guidelines are the local people, but other important players are also targeted such as local government, local NGOs, local industries, and other stakeholders. The guidelines will be drafted as a result of the "local approach," in which the viewpoint shifts from the local level to national and international levels.
- 2) The second objective is to develop policy recommendations to ensure the effective application of international treaties on local participation in forest management at the national level. This activity is called the "international approach," where the viewpoint shifts from the international level to the national and local levels.
- 3) The third objective is to develop national guidelines for participation in forest management. Not only the local guidelines but also various experiences of other projects will be taken into consideration to elaborate the national guidelines. Two approaches-local and international-will be combined and synthesized at national level discussions, especially in the process to elaborate the national guidelines.

Target locations are Indonesia, Laos, and the Russian Far East. Specific features of each country concerning the forestry sector are;

Indonesia: a) reforms of forest policy in accordance with the concepts of participation and decentralization, b) chaos as a result of drastic decentralization, and c) rapid deforestation and degradation of the forest due to various factors, such as forest fires, large scale planta-

tions, logging, and slash and burn agriculture.

Laos: a) insufficient measures/mechanisms to implement new forest law, b) recent reaction to and trend of the efforts to transfer the responsibility of forest management to the local people.

Russian Far East: a) dynamic reform of forest policy, b) strong impact of the Asian countries on the management of local forests, and c) changes in local forest management along with changes in the national economic system.

2. Research Results of FY 2001

1) Results of the research

a) Local approach

On Indonesia and Laos studies those who were aware of the situation and wanted to improve it were recruited from each village, and formed a "Core Team" with researchers. After that, the core team facilitates to share an understanding of the following items between the villagers and researchers: history of the village, changes in production system, social structure and social group, village resources, customary forest management system, local marketing system, development project and activities coming from outside, facing problems, causes of problems, expected solutions of problems, need for guidelines. And the core team tried to apply any necessary technique to promote real participation of local community members.

In the process of PAR activities in the local approach, each researcher extracted points to pay attention to when elaborating the guidelines in cooperation with the local people. The framework of the local guidelines has been drafted and will be further discussed, revised, and enriched in the FY 2002.

On Russian study socio-economic situation in Lazo raion and targeted communities, its institutional barriers and bridges to the Participatory approaches, and hunting activities and forest

management of the Udeghe people in Krasnyi Yar were analyzed. In order to reveal the behavior of forest industry and relationship between local people and forest industry we conducted questionnaire survey to forest businesses. The result will be used to drafting the local guidelines.

b) International approach

As a result of international approach, the policy recommendations for Indonesia, Laos, and Russian Far East were drafted. The draft will be discussed, revised, and enhanced as well.

As for Indonesia, merits and demerits of decentralization policy on forest management were analyzed in terms of legal aspects. The importance of forest and timber certification systems were indicated in terms of tracing systems in timber distribution with reference to economic aspects.

Russian research reveals that administrative and forest management bodies were not actually ready to implement public participation, even though it was required by laws and regulations, that the Raion (district) level still had authority and community has very limited administrative power. It was also learned that forest industry policy has many defects such as lack of promotion measures for small community-based forestry business.

2) Workshops and meetings

In Fiscal year 2001 the FC Project did not hold large-scale workshops. Only small meetings and workshops were held to discuss the research plan with respective collaborators. The followings are the list of the meetings and workshops.

a) First Internal Workshop, Japan

Purpose: To discuss the research plan and framework for Phase II.

Date: June 2, 2001

Venue: Faculty of Agriculture, The University of Tokyo.

Participants: About 20 collaborators from Japan and FC staff members.

Program: Presentation of research plan for Phase II and local approach framework by Dr. Inoue

Makoto, presentation on international approach framework by Prof. Isozaki Hiroji, presentation on research plan for Indonesia (Martinus Nanang), Laos (Hyakumura Kimihiko, and Russian Far East (Prof. Kakizawa Hiroaki), and free discussion.

b) Other meetings and workshops

- First Steering Committee meeting was held on July 26, 2001 in Jakarta, Indonesia .
- Local workshop was held on July 31, 2001 in Sendawar/Melak, East Kalimantan, Indonesia.
- First Coordination Committee meeting was held on September 3, 2001 in Vientiane, Lao PDR.
- Local meetings were held on September 5, 2001 in Savannakhet and October 22, 2001 in Oudomxay, Lao PDR.
- First Steering Committee meeting was held on August 8, 2001 in Khabarovsk, Russia.
- Local meetings in Russia were held on September 25, 2001 in Lazo Raion, Khabarovsk Krai, and September 27, 2001 at the Economic Research Institute, Khabarovsk.

3. Future Task for the Second Phase

The remaining tasks for the second phase for FC Project include research and development of guidelines and recommendations.

- 1) Research for Indonesia, Laos and Russian Far East continues until the end of FY 2002, both for the local approach and international approach.
- 2) The process of developing local guidelines and policy recommendation has begun from the beginning of FY 2002. And at this point the drafts have been written and discussed in working groups, internal workshop and the Steering Committee meeting. The drafts are to be revised and finalized toward the end of the second phase.
- 3) The draft of national guidelines has not been written. The draft shall be written and finalized toward the end of the second phase, but first brainstorming forum will be held in October 2002 to develop the guidelines.
- 4) To develop, improve, and revise the guidelines and policy recommendations, several working group discussions of both local and international

approaches will be held in Japan and overseas. The Steering Committee will meet once more in each country, and community meetings will be held in each research site (village) to discuss the actual content of local guidelines. Final results will be presented at an international workshop scheduled for the end of FY 2003.

- 5) FC Project will issue some publications to include the Policy Trend Report (PTR) 2002 and the Country Reports of the three countries. PTR contains commission papers submitted by the collaborators, while the country report contains research report of local approach and international approach. The project will also publish books in English and Japanese.
- 6) The final version of local guidelines needs to be translated into local languages. This task will be done toward the end of FY 2003.



1. Outline of Second Phase Program

In order to raise awareness of and deal with global environmental issues, it is necessary to construct a cooperative international system. Similarly, in the case of environmental education, efforts made by individual countries alone are not sufficient. It is, therefore, necessary to develop a cooperative international system that promotes environmental education.

In recent years, problems such as inappropriate development, poverty, population growth, food production, natural resources and energy consumption issues, human rights, and gender issues, etc., have been recognized as being intricate issues that are linked directly to environmental issues. After the Rio Summit in 1992, international society reoriented its concept of environmental education towards 'education for sustainability'. Through the new concept of environmental education, it is suggested that all fields related to the establishment of 'sustainable society', are the target of environmental education activities. Environmental education is necessary for the purpose of tackling urgent environmental issues as well as taking a broad view on a sustainable society.

Activities of the Environmental Education Project during the first phase assessed the current status of environmental education in the Asia-Pacific region. The Project also formulated a comprehensive strategy for the region. It is understood that the necessity of these studies continues to be increasing. However, practical actions are also urgently needed in the Asia-Pacific region, and the Project will take such approaches as a top priority.

Against this background, the EE project did not only undertake a study, but also attempted to put its findings into application. Objectives in the Second Phase aimed at designing policy proposals based on the assessment of environmental education in the region, and building up a framework of IGES as a hub of environmental education activities, through strategy proposed in the First Phase. The plan proposed for the Second Phase consists of the following activities:

- To develop environmental education materials
- To organize human resource development programs
- To develop an innovative eco-tourism education models

2. Research results of FY 2001 in second phase strategic research

In the fiscal year 2001, the main activities of the Project are summarized as follows. On the basis of the IGES research plan of the Second Phase, the Environmental Education Project prepared educational material on the environment, containing information on climate change and its impact. In addition, the Project collected information on pioneering examples in environmental education. The Project also conducted a training course in collaboration with JICA for Indonesian NGO staff. As part of the eco-tourism education activity, the Project conducted field research at many eco-tourism sites. Besides these activities, the Project also conducted a study on environmental education in Northeast Asian countries and on the 'Period of the integrated studies' scheme in Japan.

1) Collection of pioneering examples on environmental education

The Project collected information on pioneering examples on environmental education from 15 countries in the world. Its objectives were to document cases of environmental education that are considered exemplary, to investigate how these cases successfully work, and to make these cases easily available and accessible to the practitioners. These examples have been compiled as a book titled "The Path to Success" and will be published in FY 2002.

2) Information book on climate change

The Project prepared a publication titled "Making Sense of Climate Change". This booklet aims at raising awareness of secondary school students about climate change and its impact on the Earth, and attempts to enhance their understanding

towards global efforts and response.

3) Wetland education material

Improving access to educational material to raise awareness on the wise use and conservation of wetlands began with preliminary consultation and dialogue with stakeholders. In order to prepare appropriate material, the Project began its activities by celebrating the sixth World Wetlands Day at Chilika Lake in India in February 2, 2002 and began direct consultation with regional and grass-roots stakeholders to define the scope of the material. Also, the Project was represented at the Asian Wetlands Symposium held in Malaysia, where discussions were held with participants about the nature of materials IGES should be preparing in promoting wetland education.

4) Training course for NGO staff in Indonesia

The Project organized an "Environmental Education Training for NGO Staff in Indonesia" from July 10 to August 12, 2001 in collaboration with the Japan International Cooperation Agency (JICA). IGES has been organizing the training program since 1999 and this was the third such program. Trainees from different NGOs in Indonesia took part in the program and obtained information and knowledge about practical activities on environmental education through field visits, observation, and direct interaction in Japan.

5) Activities on eco-tourism education

With a view to sustainable utilization of natural and social resources in developing countries, the Project conducted fieldwork at several eco-tourism sites in FY 2001. Cambodia, Costa Rica, Singapore and Malaysia were selected as the target countries, and preliminary fieldwork and book reviews were conducted for the Project to prepare an 'eco-tourism education model' and then pilot test it by organizing a trial tour in collaboration with concerned stakeholders.

6) The 'Period of the Integrated Studies' scheme

Book reviews and field study were conducted on the "Period of the Integrated Studies" scheme, which is a newly-introduced study period in Japan, and considered to be an ideal period for implementing environmental education in school.

Yomitan village in Okinawa prefecture was selected as a target area in the field survey of this research.

7) Tripartite Environmental Education Network

The Project conducted a study in Northeast Asian countries in order to assist the activities of the Tripartite Environmental Education Network (TEEN). The second workshop and symposium of the China-Japan-Korea TEEN was held in Beijing, China in October 29-31, 2001 and the Project participated in this meeting. The Project prepared a paper titled "Recent Circumstance of Environmental Education in Japan" and made a presentation in the 2nd workshop.

8) Environmental Education Symposium in Middle East

The 'Regional Symposium on International Experiences in Environmental Education' was held on April 28-30 2001 in Dubai, the United Arab Emirates (UAE). About 50 people from the Middle East region, France, Tunisia, Japan, Egypt, Germany, Malta, and Canada attended the symposium. The Project participated in the symposium and presented a report titled "Environmental Education in Japan".

3. Future tasks for the second phase

The Project will continue the activities of the first year into FY 2002. These are the development of environmental education materials, organization human resource development, and development of innovative eco-tourism education models.



Ecotourism Site/Costa Rica National Biodiversity Institute

On the topic of developing environmental education materials, the Project will draft a package of educational materials for wetland conservation. This material will be discussed in a regional workshop of wetland educators, planners and managers. A paper highlighting its concepts and content will be presented and proposed to international conferences related with wetland and biodiversity conservation. In organizing human resource development, the Project will continue training for Indonesian NGO staff in environmental education. Regarding eco-tourism, the Project will continue its research activities into fiscal year 2002 as well. In these activities, the Project will undertake socio-economic studies of the Tonle Sap Lake in Cambodia.

Besides the above mentioned activities, the Project will continue research that will assist the activities of Tri-

partite Environmental Education Network, and organize international conferences of environmental education utilizing the material and expertise produced by the Project.



Ecotourism Site/Malaysia Iban Longhouse Community

1. Business Report of Fiscal Year 2001

In FY 2001, LTP 1) organized a series of IGES-wide study sessions as a preparation for the "Environmental White Paper for Sustainable Development in the Asia-Pacific Region (IGES White Paper)," which is an IGES-wide project; 2) finalized the ECO ASIA Long-term Perspective Project (LTPP) and published a final report of LTPP; 3) prepared for the initiation of the "Asia-Pacific Environmental Innovation Project (APEIS)," a successor project to LTPP; 4) provided research outcomes and assisted with the preparation of meetings of the "Asia-Pacific Forum for Environment and Development (APFED)," where IGES serves as the secretariat, and 5) organized a series of Study Group meetings on the IT Revolution and the Environment, as well as participating in the UNEP initiative on ICT and the Environment in Asia and the Pacific. In addition, LTP conducted several studies commissioned by outside organizations.

1) IGES White Paper Project

At the Board of Directors Meeting in February 2001, it was decided that IGES would launch a new IGES-wide project: the IGES White Paper Project, which is a three-year project. The IGES White Paper (tentative name) is slated to be published by the end of FY 2003. A special edition of the IGES White Paper is also planned, to be presented at WSSD in August/September 2002.

During April - July 2001, a series of in-house study sessions with the participation of all IGES projects was held to review major reports on environment and development, and in order to identify essential elements of the White Paper including its objectives, audience, and possible structure and contents.

In August 2001, a Task Force was created in IGES to further elaborate ideas presented at the study sessions and to prepare a detailed work plan for the project. The team met three times and agreed upon the objectives, audience, tentative structure and contents of the IGES White Paper.

Based on the result of the Task Force meetings, work has been initiated for the preparation of a special edition of the IGES White Paper. This special edition of the IGES White Paper consists of a research profile of IGES, which aims to provide an input to the discussions at WSSD from the perspective of research findings on strategies towards sustainability in Asia and the Pacific, and set future directions for policy-oriented research for sustainable development.

2) ECOASIA Long-term Perspective Project

As the final outcome of the ECO ASIA Long-term Perspective Project (LTPP), which was conducted as a consigned task from the Ministry of the Environment, Japan, LTP published its final report, entitled "Towards a Sustainable Asia and the Pacific: Report of ECO ASIA Long-term Perspective Project Phase II." The report consists of lessons learned from LTPP research activities implemented by the IGES New Development Patterns Project (NDP), the predecessor of LTP, in close cooperation with each IGES project and collaborative researchers inside and outside of Japan during FY 1999 and FY 2000, and the analyses added by LTP. The report discusses various environmental issues faced by the Asia-Pacific region based on the four key concepts developed through LTPP activities, which are i) Eco-Consciousness, ii) Eco-Partnership, iii) Eco-Technology/ Eco-Investment, and iv) Eco-Policy Linkage, and proposed policy recommendations for practical actions. The report was endorsed at ECO ASIA 2001, Tokyo, in October, and it was widely distributed to participants of the high-level regional preparatory meeting for WSSD held in Phnom Penh, Cambodia, in November 2001.

3) Preparation for the "Asia-Pacific Environmental Innovation Strategy Project (APEIS)"

LTP made preparations for the Research on Innovative and Strategic Policy Option (RISPO), which is one of the sub-projects of an integrated

research project of the "Asia-Pacific Environmental Innovation Strategy Project (APEIS)", a project that is to be initiated in FY 2002. A possible collaboration with the Millennium Ecosystem Assessment was sought at a joint workshop in September 2001, and opinions were exchanged with government officials and researchers in the region, to help identify the pressing environmental issues and needs of the region to be reflected in the research design of RISPO.

4) Asia-Pacific Forum for Environment and Development (APFED)

The Asia-Pacific Forum for Environment and Development (APFED) was established in October 2001 in order to address critical issues facing the region and to propose a model of equitable and sustainable development for the region. IGES served as the Secretariat of the Forum.

In FY 2001, APFED had three meetings and two associate meetings, namely: the Preparatory Meeting on September 28, 2001, Tokyo, Japan; the Organizational Meeting on October 14, 2001, Tokyo, Japan; the First Substantive Meeting (APFED1) on January 12-13, 2002, Bangkok, Thailand; the APFED1 Expert Meeting on January 10, 2002, Bangkok, Thailand and the APFED1 Multi-stakeholder Meeting on January 11, 2002, Bangkok, Thailand.

LTP provided its expertise to the APFED deliberation process. For APFED1, LTP provided overview papers on four issues that APFED gives priority, namely: freshwater resources, renewable energy, trade, and finance.

LTP also drafted the APFED Message to the World Summit on Sustainable Development (WSSD), which was finalized at the Second Substantive Meeting of APFED held on May 4-5 2002 in Jakarta, Indonesia. The Message was distributed to PreCom IV of WSSD held in Bali, Indonesia on May 27 - June 7.

5) ICT and Environment

LTP organized the 3rd-11th Study Group Meeting on the IT Revolution and the Environment with Nikkei Business Publications, Inc., where active discussions took place on how the IT revolution

changes economic activities, individual lifestyles, and social structures, and on how IT can be used for saving energy and resources consumption. Preparation is underway for making a report of study group meetings in summer 2002, and publishing a book entitled "Can IT Revolution Save the Earth? (tentative title)" at the end of the FY2002.

LTP participated in the initiative known as the Information and Communications Technology and the Environment in Asia and the Pacific (ICTEAP), led by the United Nations Environment Programme / Regional Office for Asia and the Pacific (UNEP/ROAP). LTP researchers took part in the Strategic Planning Meeting held in Bangkok in August, 2001, and engaged in building a database of success stories of ICT application for the environment in the region, conducting research on ICT application for reducing GHG emissions and on ICT application for industrial waste exchange.

6) Contribution to the preparatory process for WSSD

As a preparatory process for WSSD, the preparation of a report to assess the implementation of agreements made at UNCED held in 1992, such as Agenda 21, was commissioned by the Task Force for the Preparation of WSSD in Asia and the Pacific, consisting of ADB, UN/ESCAP, UNDP, and UNEP.

The report, entitled "Sustainable Development in North-East Asia: Assessment and Challenges of Agenda 21", is a comprehensive assessment of the implementation of Agenda 21 for the North-East Asian Subregion (Democratic People's Republic of Korea, Japan, Mongolia, China, Republic of Korea, and the Russian Federation). Trips to Mongolia, China, and the Republic of Korea were made in order to conduct research and for revising the draft reports.

The first draft of this report was presented at the Sub-regional PrepCom for Northeast Asia, held in Beijing, China in July 2001, and the final report, completed in September 2001, was compiled in a synthesis report and distributed to the partici-

pants of the high-level regional meeting for the World Summit on Sustainable Development held in Phnom Penh, Cambodia, in November 2001.

7) Commissioned study on "Trend of strategy for environmental cooperation"

A commissioned study from the Ministry of the Environment, Japan on "Trends of strategy for environmental cooperation" was carried out. To formulate national and local governments' basic strategies for environmental cooperation with developing countries toward achieving "sustainable development", information and reports on activities by UN, international organizations and foreign governments were collected. Also, a study session was held to gather Japanese experts' idea on these issues.

2. Future Tasks for the Second Phase

The main project activities in the FY2002 will be the APEIS/RISPO and the APFED and the interim report of them will be presented at the WSSD side events. Research preparation for a new project, Freshwater Resources Project, will also be conducted.

1. Outline of the Second Phase Project Program

The Business and the Environment Project started its operations regarding the research on "Environmental Actions Taken by the Private Sector", at the IGES Kansai Research Center, in June 2002.

Voluntary actions taken by private companies are considered one of the major approaches, along with regulatory or economic approaches. As seen in the ISO14000 Series, it has become a global trend to integrate economy and environment in corporate management. It is an urgent and strategic task, particularly in the Asia-Pacific region where radical economic growth is expected in future.

As methods to promote voluntary action, the environmental management system of ISO14001, environmental accounting, environmental reporting have recorded notable progress. However, the research on how to integrate environmental management methods with corporate management system methods, and the research on the content of socio-economic system to make the mechanism more effective, remain to be tackled on a global scale in the twenty-first century.

In the research in question, this issue is dealt with from a comprehensive viewpoint. Methods and means for promoting voluntary actions taken by private companies for sustainable development of the Asia-Pacific region will be sought, supported by partnerships including the industrial sector and consumer groups. Moreover, best practices of voluntary actions taken by private companies for environmental conservation will be analyzed. Then there will be recommendations of concrete methodologies for promoting such practices, and the research of the way socio-economic system should be to receive such practices.

2. Positioning and Activity Report of FY2001 in the Second Phase

FY2001 is the first year for the project. Therefore the focus will be on the establishment of networks in Asia-Pacific region and Japan, especially among research institutions, private companies, universities, and public

organizations in the Kansai region. The three sub-themes: 1) environmental accounting, 2) environmental information disclosure, and 3) environmental valuation, have been selected, and research survey was conducted, centering on the analysis of the current status in Japan.

1) Environmental Accounting

a) Analysis of current status of environmental accounting information in Environmental Report

The IGES Kansai Research Center conducted data analysis of Environmental Accounting Information in the Environmental Reports of FY2000, which were collected from the companies listed on the First Section of the Tokyo Stock Exchange. It was found that environmental accounting guidelines heavily influenced corporate practices and that, there is a significant difference in the percentage for disclosing environmental accounting between industries.

b) Survey of Environmental Accounting

Targeting companies that are disclosing environmental accounting in the Environmental Report, a survey was conducted to determine the status of application of environmental accounting within each company, which is not known from the disclosed information. The survey was conducted on: (1) Environmental Accounting in General, (2) Application of Environmental Accounting, (3) Investment and Cost, (4) Benefits, and (5) Third Party Verification. As a result of the survey, it became clear that environmental accounting in Japan leads in external information disclosure, but is behind in internal management.

c) Current Status of Environmentally Oriented Corporate Performance Evaluation Which Uses Environmental Accounting, and Survey of Problems

A special joint session on this topic was jointly organized by the Society for Environmental Economics and Policy Studies (SEEPS), in order to conduct research on the state of application of

environmental accounting in private companies, and the current status and issues of environmentally corporate performance evaluation management. The summary of the survey was compiled into a report.

d) Study Group of Companies for Environmental Accounting

To ensure that environmental accounting is a greater factor in the corporate decision making process, a study group was set up, comprising of researchers and two members each from 14 private companies. The group meets on an ongoing basis. It will meet six times from FY2001 to FY2002, and the results of the study will be published in book form.

2) Environmental Information Disclosure

a) Survey of Environmental Reports Publication in Japan

Targeting 2,525 listed companies in Japan, a survey was conducted on the issue of environmental reports. Then number of companies that have published an environmental report between January and December 2001 in a booklet form, and those that did so only on their website, have been counted.

b) Analysis of the Environmental Reporting in Japan

A survey of items of information disclosure is being conducted to clarify the characteristics of

information disclosed in environmental reports of Japanese companies, categorized by business, corporate size, or the history of publication. In response to the results of the analysis, a concrete study was conducted on the types of policies necessary for promoting environmental information disclosure in companies.

c) Research on comparability of Environmental Reports

Three to four companies were selected to represent three industries: automobiles, chemicals, and beer. A study was conducted to determine the degree to which their environment reports might be used for comparing these companies. Tasks that need to be completed to facilitate comparison were identified. Through this study, the IGES Kansai Research Center hopes to clarify the method for achieving comparability among environmental reports, which is one of the biggest challenges in this field.

d) Seminar for Environmental Reports — Possible Influence of GRI Guidelines in Revision —

A seminar on issues related to the revision and outline of the Global Reporting Initiative (GRI) Guidelines was held on March 8 in Kobe. The seminar targeted mainly at private companies employees.

3) Environmental Valuation

a) Current Status of Environmental Valuation studies and practices

Calculating the cost effectiveness of environmental conservation activities is necessary in corporate decision-making. Yet it is difficult to compare the cost and performance because the cost is in monetary units and effect is in the quantity of materials. Here, environmental valuation may be used to estimate the monetary cost for environmental loads. Information was collected and organized, including existing reference materials of environmental valuation.

3. Future Tasks for the Second Phase

In future, research of environmental accounting in Japan and analysis of current states of environmental

Environmental Costs			
Category		Investment (million yen)	Expenses (million yen)
Cost within Business Area	Pollution Prevention	5,500	5,000
	Global Environmental Conservation	9,900	2,400
	Recycling Natural Resources	1,400	5,300
Upstream/Down Stream Cost		3,300	3,280
Management Cost		30	6,440
Research & Development Cost		2,400	12,530
Social Activities Cost		50	1,440
Environmental Damage Cost		1,120	740
Total		¥ 23,700	¥ 37,130

Environmental Conservation Effects		
Content of Effects		Indexes
Effects correspond to Cost within Business Area		
[example] Gree House Gas reduction by energy saving		△9,800 t-CO2
Sulfur Oxides(SOx)reduction by changing to better fuel		△ 300t-SOx
Waste reduction by recycling materials		△5,300t-Waste
Effects correspond to Upstream/Down Stream Cost		
[example] CHG reduction by using more energy-efficient product		△25,000 t-CO2

Ancillary Economic Benefits	
Contents of Effects	Amount of Money (million yen)
Profits	
[example] Revenue by making by-product of waste and selling it	¥ 200

Report of Environmental Accounting

accounting such as information disclosure by environmental reports will be further pursued. Policies that promote corporate activities will be examined, and the research of best practices will be promoted. Examination of indexes to be presented to corporate management will also be carried out.

In addition, trends of environmental accounting and environmental information disclosure in the Asia-Pacific region, Europe and the US will be surveyed. At the same time, there will be a study of how Japan may enhance its contribution to the Asia-Pacific region.

With cooperation from private companies, research on material flow cost accounting methods will be conducted as a study for developing a new environmental accounting methodology.



Project Meeting

III. IGES Capacity Building Program

1. Outline of IGES Capacity Building Program

"The ability of a country to follow sustainable development paths is determined to a large extent by the capacity of its people and its institutions, as well as by its ecological and geographical conditions.... A fundamental goal of capacity-building is to enhance the ability to evaluate and address the crucial questions related to policy choices and modes of implementation among development options ...". (Agenda 21)

Based on the principles of Agenda 21, the IGES Capacity Building Program (Program) supports learning for sustainable development by making research easily accessible to policy makers and policy implementers.

To implement the mission, the Program focuses on eLearning (Internet-based learning) as the primary tool of implementation, and blending eLearning with face-to-face training workshops to develop capacities of both individuals and their organizations with a commitment to narrow the digital divide. Program activities build on IGES projects and strategic research results, as well as the Program's large international network, for implementation and content development. Target beneficiaries are leaders and managers from government, business, schools and universities, non-governmental organizations, with special emphasis on the Asia-Pacific countries.

The Program has a unique niche among other capacity building providers in sustainable development due to the combination of three complementing elements:

- 1) eCourses - Offering eCourses: free, short (0.5-8 hours), nonacademic, research based, application oriented, designed for busy decision makers, self-study, asynchronous, with 24 hour access;
- 2) Courseware - Providing users with free, original, continuously enhanced IGES courseware: Course Maker (downloadable from the IGES website), Course Manager Pro;
- 3) Face-to-Face Training - Training leaders and trainers to develop their own eLearning system in order to strengthen their capacity building programs.

In FY2001 the Program focused on laying the foundation of a dedicated IGES eLearning System, and implementing select face-to-face training workshops. Results include

- eCourses (both in English and Japanese) addressing issues related to sustainable development
- Networks of leaders who are committed to continuous capacity development through use of the IGES eLearning System.
- A well-functioning, user-friendly eLearning system of software both in English and Japanese.

Results can be seen at <http://www.iges.net> (English), <http://www.iges-japan.net> (Japanese).

2. About eLearning

eLearning has many interpretations. In the broadest sense eLearning includes all learning that uses electronic media (radio, TV, internet, phone etc.). At the IGES Capacity Building Program we use eLearning in a narrower sense by describing eLearning as a new way of distance learning whereby students/trainees access learning/training material on the Internet or stand-alone CD-ROMs, and they communicate with their teachers/trainers via e-mail. This new approach makes learning more flexible, provides learners with opportunities of capacity development regardless of time and geographical location. eLearning materials include interactive eCourses that can be categorized by two major criteria: 1) mode of study: self-study or teacher-facilitated; 2) synchronicity among learners and their trainer: synchronous, asynchronous.

IGES Capacity Building Program laid a solid foundation of an Environmental eCourse Library in FY2001. The intensive eCourse development resulted in a total of 30 new eCourses in English and Japanese (see Table). With FY2000 results, a total of 37 eCourses were available by the end of FY2001. The principal author was Glen Paoletto, Senior Research Fellow. These eCourses offer an introduction to environmental issues (such as the Introduction to Climate Change) and transferable strategic skills (such as Management) that are necessary to successfully implement environmental projects. The five most popular eCourses in FY2001 included:

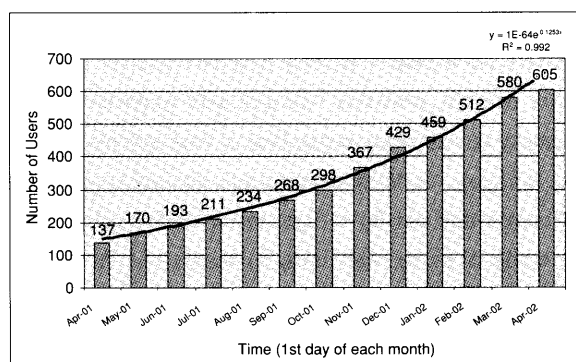
eCourses development in FY2001

Environment

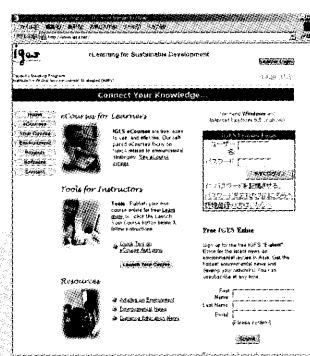
#	eCourse title	English	Japanese
1	ISO14001 for Local Governments	●	
2	ISO14001 Implementation for Companies	●	●
3	ISO14001 Staff Training	●	
4	EMS Auditing	●	
5	Implementing Sustainable Development	●	
6	Introduction to Climate Change	●	
7	Analytical Tools for Climate Change Strategy	●	
8	Climate Change Mitigation	●	
9	Mitigation Options in Forestry	●	
10	Participatory Forest Management in South-East Asian Countries	●	●
11	ICT and Environment	●	

Strategic skills

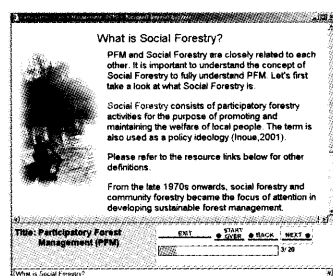
#	eCourse title	English	Japanese
1	Management	●	
2	Strategic Planning for Environmental Organization	●	●
3	How to Write a Dissemination Plan	●	●
4	How to Write a Marketing Plan	●	●
5	Project Evaluation	●	
6	Presentation Skill	●	●
7	Conflict Resolution	●	●
8	Consensus Building	●	●
9	Risk Management	●	
10	Effective Meetings	●	
11	How to Negotiate	●	
12	How to Sell	●	
13	Implementing eLearning Projects	●	
14	How to structure Online Course and Lessons	●	
15	How to Use Course Maker	●	



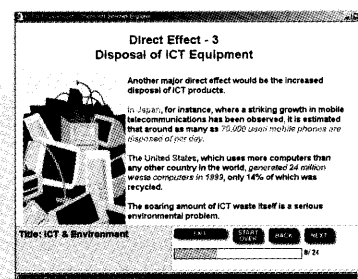
Number of Users of IGES eLearning System, FY2001



IGES eLearning Website



eCourse on Participatory Forest Management developed by IGES Forest Conservation Research Project



eCourse on Information Technology and the environment developed by IGES Long Term Perspective and Policy Integration Research Project

Leadership, ISO 14001 Implementation, Presentation Skills, Conflict Resolution, and Strategic Planning.

eCourses are available at <http://www.iges.net> (English) and <http://www.iges-japan.net> (Japanese).

454 new users enrolled into IGES eLearning system in FY2001 with an average new users/month rate of 38 (see Graph), and a 13-14 student per course ratio. These numbers show that the emphasis in the initial phase was on developing and piloting eCourse materials.

1) Training workshops

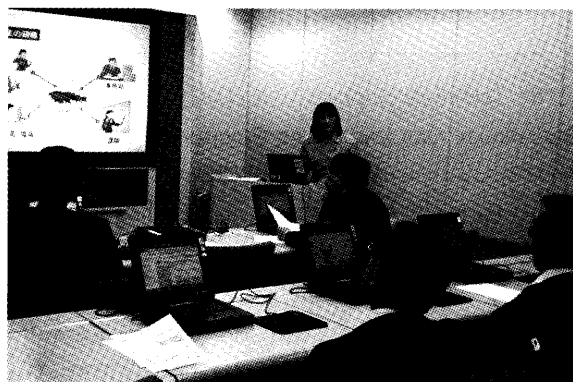
Leadership training is a high priority as leaders and mid-career decision makers are the target audience of the Program. In FY2001, 35 leaders were trained for leadership skills in two workshops: a) the IGES-K-FACE eLearning seminar introduced new ways of training methodology including eLearning to decision makers in Kanagawa Prefecture, Japan; b) the IGES - LEAD-Japan Cohort 8 training session strengthened leadership capacities of high impact leaders from Japan and China, representing different stakeholder groups of sustainable development implementation projects.



Leaders from Japan and China participate in IGES - LEAD-Japan Cohort 8 innovative training session on Leadership for Sustainable Development

2) eLearning Projects

Although many corporations employ eLearning in their human resources development, this training approach is still considered a challenge in government offices. Kanagawa Prefecture administration set forth a pioneering initiative in Japan by exploring a collaboration with the Capacity Building Program to adopt the IGES eLearning system to incorporate eLearning into their environmental training of 4,000 local government officials over the

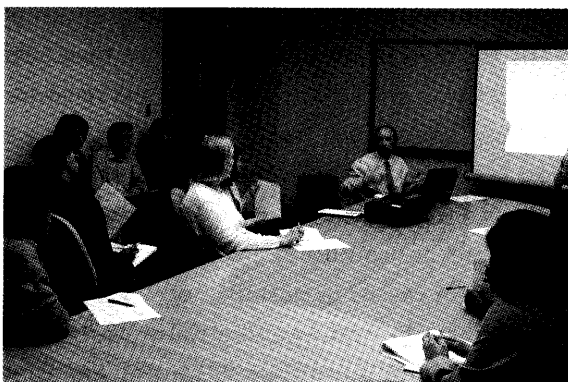


Local government officials of Kanagawa Prefecture are engaged in eLearning training

coming years.

3) Internship Program

Two research interns added force to the Capacity Building Program in FY2001: Andrea Deri, Education Director, Institute for Sustainable Communities, USA (February - May 2001) and Eldar Kurbanov, Associate Professor, Forest Inventory and Management Department, Mari Polytechnic Institute (MPI), Head of International Relations, Mari State Technical University, Russia (December 2001 - June 2002). This internship program is exclusively for LEAD Fellows (LEAD: Leadership for Environment and Development, <http://www.lead.org/>), mid-career professionals promoting sustainable development, who join IGES for 3-6 months to share their expertise with IGES researchers and strengthen their leadership skills. Ms. Deri developed an eCourse on Community-based Learning for Sustainable Development, Mr. Kurbanov authored a book in Russian and an eCourse in English on a new approach to carbon budget model in boreal pine forests.



Eldar Kurbanov, LEAD Fellow, IGES research intern explains his new approach to carbon budget modeling at IGES in-house seminar.

IV. Activities of IPCC/TSU

The Technical Support Unit (TSU) of the National Greenhouse Gas Inventories Programme (NGGIP) for the Intergovernmental Panel on Climate Change (IPCC), hosted by the IGES, has been coordinating two main projects in FY 2001-02 under the guidance of the IPCC Inventory Task Force Bureau (TFB). These projects are on: Land Use, Land Use Change and Forestry (LULUCF) and Emission Factor Database (EFDB). The preparation to advance the work on LULUCF began in 2001. Following up to the Informal Consultations in March 2001, the TSU organised an Expert Group Planning Meeting on LULUCF in August 2001. In September 2001, IPCC XVIII approved the LULUCF Work Programme including the request to invite governments to nominate experts for the work. The TSU, in consultation with the TFB, developed the letter in early October 2001 to invite governments to nominate experts. In November 2001, the TSU received almost 300 nominations of experts with curriculum vitae (CV). The TSU reviewed these CVs and recommended names for the LULUCF work for consideration by the TFB. In November 2001, in Marrakech, at the 15th Session of the Subsidiary Body for Scientific and Technological Advice (SBSTA) of the United Nations Framework Convention on Climate Change (UNFCCC) and the 7th Session of the Conference of Parties (COP) to the UNFCCC, the TSU, in support of the TFB, organised a side-event on the NGGIP-LULUCF Programme. In response to the invitation from the UNFCCC (COP decision 11/CP.7), the TSU, in support of the TFB, developed three tasks on LULUCF: Task 1 - Good Practice Guidance Report for the LULUCF sector; Task 2- Definitions for degradation of forests and devegetation of other vegetation types, and methodologies to inventory emissions and removals from these activities; and Task 3 - Issue on factoring out direct human-induced changes in carbon stocks and anthropogenic greenhouse gas emissions and removals from indirect human-induced and natural changes, as well as those caused by past practices.. The slate of authors/experts for Task 1 was finalised by the TFB and IPCC Bureau in December 2001 and the First Authors/Experts Meeting was held in March 2002, Eisenach, Germany. The TSU also developed a number of

draft documents, including the Terms of Reference, Table of Contents and work plans for the Tasks 2 and 3 for consideration by the TFB, IPCC Bureau and the IPCC Panel.

For the EFDB Project, the TSU organized the First Expert Meeting in July 2001, Paris, France, to discuss the functional design of the database and the procedure and schedule for the development and pilot-testing of the prototype database. A "Call for tender to produce the database" was prepared on 7 September 2001, in consultation with the IGES Secretariat, the TFB Co-chairs, and the Project Co-chairs for the development of the database. A contract was made in October 2001 with SPIRIT (an IT consultancy company in Slovakia), in consultation with the IGES Secretariat and EFDB Steering Group. Between November and December 2001, the TSU prepared the first data sets of default emission factors from the IPCC Guidelines and the report on Good Practice Guidance and Uncertainty Management for bulk import to the prototype database. The prototype database was released for testing on the web site on 17 January 2002. The TSU prepared the guidelines for pilot testing and invited experts to evaluate the prototype and submit feedback/ comments for further improvement. The pilot testing of the database ran from 11 February to 8 April 2002.

In support of the TFB, the TSU has organised three meetings of the Bureau: TFB6 in August 2001, Geneva; TFB7 in December 2001, also in Geneva; and TFB8 in March 2002, Eisenach, Germany. The TSU also pre-



TSU members working with TFB Co-chair and LULUCF Steering Group members in the WMO headquarter in Geneva (The 7th session of TFB, 13-14 December 2001)

pared reports for the TFB of the progress of the NGGIP Projects for reporting to the following meetings of the IPCC; IPCC Bureau XXII and IPCC XVII (Plenary) in April 2001, Nairobi, Kenya; IPCC Bureau XXIII and IPCC XVIII (Plenary) in September 2001, Wembley, UK; and IPCC Bureau XXIV in December 2001, Geneva. In addition, the TSU prepared reports and participated in the following meetings of the UNFCCC; Resumed UNFCCC COP 6 in July 2001, Bonn, Germany; UNFCCC Inter-sessional Workshop on Issues related to Articles 5, 7, and 8 of the Kyoto Protocol in October 2001, Bonn, Germany; UNFCCC SBSTA 15 and COP 7 in November 2001, Marrakesh, Morocco; and the UNFCCC Expert Meeting to assess experiences in the use of the reporting and review guidelines of GHG inventories of Annex I Parties in December 2001, Bonn, Germany.

In support of IGES activities, The TSU prepared reports and participated in the regular monthly meetings of IGES where information was exchanged and collaborative undertakings were explored. In particular, the TSU worked closely with IGES in preparing for the "call for tenders" and the "contract" to effect the development of the Emission Factor Database.

The TSU, as a group working on development, refine-

ment, and dissemination of methodologies for GHG inventories, participated in ten international / regional / local meetings. This includes the TSU providing resource people in the JICA Seminar on Strategies for Climate Change and Development of National Inventories, February 2002, Tokyo, Japan.

In addition to the above project activities, the TSU has responded to a number of queries from users of the Revised 1996 IPCC Guidelines for National Greenhouse Inventories and the IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories. The TSU was also engaged in preparing for the publication of the Background Papers, which were used in developing the IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories.

The TSU will continue to provide support to the TFB to complete the work on LULUCF by 2003 (for Tasks 1 and 2) and 2004 (for Task 3). It will continue to develop and improve the database and will host the Web-based database in its initial stage. The TSU will continue to support the activities of the IPCC NGGIP and IGES in its research and development activities.

Emission Factor XLS Report (ID: 3104)

Administrative Information

Date Provided:	Gibbs, M.J. and D.E. Johnson
Date Provider Country:	United States of America
Date Provider Contact:	
Date received:	Unknown
Date calculated:	Unknown
Date published:	1993

Technical Information

Gas:	METHANE
IPCC Category:	Agriculture -> Enteric Fermentation -> Dairy Cattle
IPCC Worksheet Number:	4.11
Main influencing factors:	Region : North America Feeding situation: Stall Fed
Additional influencing factors:	
Description:	Enteric Fermentation Emission Factors for Cattle
Value:	138 kg/head/yr
Value in common units:	
Equation:	4.14
Source of data:	Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories
Technical Reference:	Gibbs, M.J. and D.E. Johnson (1993), "Livestock Emissions," In: International Methane Emissions, US Environmental Protection Agency, Climate Change Division, Washington, D.C., U.S.A.
Reference language:	English
Abstract in English:	
Upper confidence limit:	
Lower confidence limit:	
Data quality:	Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories
Distribution shape:	
Data quality reference:	
Other info on data quality:	

Usage/Review Information

Type of emission factor:	
Year of applicability:	
Region of applicability:	North America
Country of applicability:	
Sublocation of applicability:	
Possible applicability:	
Comments from the data provider:	
Comments from others:	

IPCC NGGIP Logged user: Not logged in

Home | Login | Profile | Single User | Logout | IPCC web site

Find EF - Step 1 - Choosing the IPCC category

This is the Step 1 of defining the criteria needed for searching the EFDB in selection tables. Please, choose one of the IPCC categories presented in the list below. Click on categories to expand/collapse IPCC category tree nodes. The next is to make the second level of the IPCC tree hierarchy. After choosing the desired IPCC category, click Proceed to Step 2 button located at the bottom of this page.

- 1. Energy
 - 1.1 Industrial Processes
 - 1.2 Solvent and Other Product Use
- 2. Agriculture
 - 2.1 Enteric Fermentation
 - 2.2 Manure Management
 - 2.3 Rice Cultivation
 - 2.4 Agricultural Soils
 - 2.5 Perennial Forcing of Savannas
 - 2.6 Field Burning of Agricultural Residues
 - 2.7 Other (please specify)
- 3. Land Use Change & Forestry
 - 3.1 Land Use Change & Forestry
 - 3.2 Other (please specify)

Go back to Find EF Step 1 | Proceed to Step 2

3104
IPCC Category: Agriculture -> Enteric Fermentation (EA)
Number of emission factors covered by your criteria: 0

Image of the IPCC Database on GHG Emission Factors (Prototype as of 31 March 2002)

V. Contribution to International Conferences

A. Contribution to the Environment Congress for Asia and the Pacific (ECO ASIA) 2001

1. Background of the Conference

The Tenth Environment Congress for Asia and the Pacific (ECO ASIA 2001) was held on October 13-14 2001 in Tokyo. This conference was organized by the Ministry of the Environment of Japan and supported by the Ministry of Foreign Affairs, Japan International Cooperation Agency (JICA), Japan Bank for International Cooperation (JBIC) and Japan Environment Corporation. Eighty-eight people attended the conference: 13 environment ministers and 39 government officials from 21 countries, mainly from the Asia-Pacific; and 36 people from 12 international organizations.

ECO ASIA was established in 1991 by the initiative of the then Environment Agency of the Government of Japan, as a forum, for high-level government officials and representatives from international organizations to exchange their views on environmental policy in Asia and the Pacific. It has since been held annually, except in 1992, in major cities in Japan. In 1993, a research project to reveal the state and future perspectives of the environment in the region, namely the ECO ASIA Long-term Perspective Project (LTPP), was launched in order to enrich environmental policy dialogue at ECO ASIA. Since its launch, the LTPP has been conducting comprehensive research on a range of issues on sustainable development and has been reporting and putting forward policy recommendations to ECO ASIA. IGES has been invited to take key roles in the implementation of the LTPP since 1999, coordinating the research activities, reporting and putting forward the policy recommendations.

Parallel to the ECO ASIA 2001, "Conference on Global Environmental Crisis" was held on October 12-14 2001, organized by the Global Environmental Action (GEA) and co-hosted by the United Nations Department of Economic and Social Affairs (UNDESA).

2. Contribution to the Conference

IGES submitted the draft final report of LTPP Second Phase (1998-2001) and Mr. Kazuo Matsushita, then Acting Vice-President of IGES, presented the report. This

report (entitled "Towards a Sustainable Asia and the Pacific: Report of ECO ASIA Long-term Perspective Project Phase II") is a comprehensive one, but it applies especially the four key concepts (Eco-consciousness, Eco-partnership, Eco-technology/Eco-investment and Eco-policy linkage) to six major environmental issues in the Asia-Pacific region (climate change, urban environment, freshwater, forest biodiversity, education for sustainability). This draft report was approved at the conference and was submitted to the High-level Regional Meeting for WSSD, which was held in November 2001 in Phnom Penh.

3. Prospects

As a follow-up of the ECO ASIA Long-term Perspective Project, the Ministry of the Environment of Japan suggested the launch of an Asia-Pacific Environmental Innovation Strategy Project (APEIS) and this was endorsed at the conference. This project aims to 1) understand environmental status (monitoring and assessment), 2) study, plan and draft environmental strategies and 3) present concrete environmental cooperation in a systematic way as a "strategy package" and to implement it throughout the region in collaboration with the countries in the Asia-Pacific region. IGES is expected to be in charge of studying environmental policy options and to continue its contribution to ECO ASIA.

Also at this conference, establishment of Asia-Pacific Forum for Environment and Development (APFED) was approved. This forum aims to address critical issues facing Asia and the Pacific region and to propose a model of equitable and sustainable development for the region, and consists of eminent persons of the region. IGES is to serve as the secretariat for this forum. (For details of this forum, please refer to the next section).



B. Contribution to the Asia-Pacific Forum for Environment and Development (APFED)

The Asia-Pacific Forum for Environment and Development (APFED), an independent body consisting of 23 eminent persons mainly from Asia and the Pacific region, was officially established with the approval of the Tenth Environmental Congress for Asia and the Pacific (ECO ASIA 2001) in October 2001. The aim of the forum is to deliberate on and present a new development model for the 21st century by the end of 2004. Under the leadership of the Chair of the Forum, Mr. Ryutaro Hashimoto, former Prime Minister of Japan, APFED began its deliberation process in FY 2001.

As the Secretariat of the Forum, IGES provided not only logistic support to the APFED activities, but also substantial support by providing relevant background information for the meetings and drafting the APFED Message to the World Summit on Sustainable Development (WSSD) to be held in August-September 2002 in Johannesburg, South Africa. Details of the APFED meetings in FY 2001 and contribution of IGES to the Forum are described below.

1. Preparatory Meeting

The Preparatory Meeting of APFED was held on 27 September 2001 in Tokyo with the presence of eleven APFED members including Mr. Ryutaro Hashimoto and nineteen observers including representatives of international organizations, such as UNEP and UN ESCAP and the then-Environment Minister Ms. Yoriko Kawaguchi.

The participants of the meeting discussed the draft Terms of Reference (TOR) and timetable, and agreed that APFED deliberations will look to the year 2025 and beyond, with full consideration of the diversity of the region. They also agreed that topics for further discussion must be narrowed down to obtain more substantive results. It was also decided that APFED should present its recommendations to the WSSD.

IGES LTP contributed to the Preparatory Meeting by drafting the TOR and timetable as well as a background paper on sustainable development in Asia and the Pacific region and future perspectives. These documents were used as the basis for the discussions.

2. Organizational Meeting

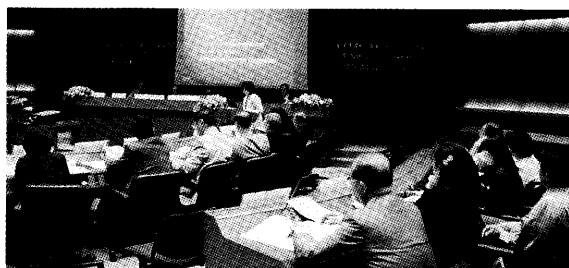
With ECO ASIA 2001's approval of its establishment, an APFED Organizational Meeting was held on October 14 in Tokyo. Twelve APFED Members including Mr. Hashimoto and nine observers participated in the Meeting.

After electing Mr. Hashimoto as the chair of the Forum, the members decided that the Forum should focus on its immediate goal of formulating its special message for the WSSD. APFED members reviewed the issues facing the region and identified four sectoral issues that should be paid priority attention: freshwater resources, renewable energy, trade and finance.

3. First Substantive Meeting

The first Substantive Meeting of APFED (APFED 1) was held at the UN Conference Centre in Bangkok, Thailand on January 12-13 2002, jointly organized by the UN ESCAP, UNEP, the Royal Thai Government Ministry of Science, Technology and Environment, and the Ministry of the Environment of Japan. Thirteen Forum members including APFED chair Mr. Hashimoto participated in the Meeting. Ms. Kawaguchi, the then-Environment Minister also attended the Meeting as an observer.

At the Meeting, participants discussed the elements to be included in the APFED Message to WSSD. The discussions focused on four key issues in the region that were identified at the Organizational Meeting. To facilitate the discussions, IGES provided overview papers on the four issues respectively. Regarding the topics chosen for the APFED Message, an opinion was raised that urbanization should be included as an issue in addition to these four key issues. The necessity of including pre-siding issues such as "governance" in the Message was also pointed out.



Prior the APFED1, two associate meetings of APFED were held also in Bangkok: the Expert Meeting on January 10 and Multistakeholder Meeting on January 11. Summaries of the associate meetings were drafted by IGES and reported to APFED1 by the chairs of respective meetings.

Based on the results of APFED 1, IGES drafted the APFED Message to the WSSD. In the drafting process, public comments were invited through the Internet. The APFED Message to WSSD will be finalized at the Second Substantive Meeting in May 2005 and will be distributed to the world at PrepComIV and the WSSD.

C. Contribution to the Seventh Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC)

The international framework to tackle climate change issues has, while facing various problems, made steady progress under the United Nations Framework Convention on Climate Change (UNFCCC). Conferences of the Parties (COP), have been held annually since the inaugural conference in Berlin in 1995, and the seventh of these meetings, COP7, was held in Marrakech, Morocco in October 2001. The Kyoto Protocol, adopted at the Third Conference of the Parties (COP 3) held in Kyoto in 1997, succeeded in setting quantitative emissions targets for each developing country, and was a considerable advance in global warming countermeasures. Detailed regulations for the implementation of the treaty were not fixed at COP3, but it was hoped that they would be decided at subsequent Conferences of the Parties. At COP 4 (Buenos Aires) COP 5 (Bonn) and COP 6 (The Hague and Bonn), great effort was made on how to establish rules for the actual application of the Kyoto Protocol, but it was with great difficulty that an agreement was reached, due to the severe conflict of interests of participating countries. After a long and meandering balancing process, the detailed application rules were finally compiled in a document called the "Marrakech Accord" at COP7. This document enabled participating countries to begin the ratification procedures, and from this aspect, COP7 is an event that should be remembered in the history of global warming countermeasures.

Speedy analytical surveys and information provision regarding international negotiations and content of agreement are among contributions made by the IGES Climate Policy Project for COP7. As mentioned above, there have been long and diverse negotiations when establishing detailed rules of application of the Kyoto Protocol, and thus, the negotiation process or details of the content of the agreement became extremely complex. With ratification of the Kyoto Protocol in the background, society demanded the speedy analysis of the content of agreement and provision of information, and as a response, IGES conducted research and analysis of the concrete content of the agreement and the negoti-

ation process leading to the "Marrakech Accord". The resulting information was actively provided to policy makers and stakeholders within and outside Japan. As a part of this activity, IGES co-hosted a "Post COP7 Seminar" with Global Industrial and Social Progress Research Institute. The event, which was organized in Tokyo immediately after COP7, was able to attract notable attention.

As a major contribution to COP7 made by IGES, IGES jointly organized the "IGES Climate Policy Dialogue in Asia" with other organizations including the United Nations Environment Programme. This was held as a supplementary event of COP7, with the purpose of gathering opinions from representatives of related countries, researchers and NGOs, towards reaching an agreement. This event provided opportunities for heated discussions on the future direction of global warming measures from the point of view of Asia, or possibilities of policy collaboration by Asian countries, by various participants including researchers, those responsible for negotiations, and policy-makers. Representatives from European countries were also present. Previous international negotiations concerning global warming measures have been lead by European countries, and so far, there has been hardly been any policy collaboration among countries in Asia. Therefore, it was strongly expected that IGES should play a central role in making contributions to the networking of global warming countermeasures in Asia.

Such activities by IGES regarding COP have already been widely recognized in the field of global warming, and IGES is expected to make even greater contributions in future.



D. Contribution to the Eleventh Asia-Pacific Seminar on Climate Change

The Eleventh Asia-Pacific Seminar on Climate Change was jointly organized by the Institute for Global Environmental Strategies (IGES), Ministry of the Environment of Japan, Fukuoka Prefecture, Kitakyushu City, and the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), in cooperation with the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC), the Ministry of Foreign Affairs, and the Ministry of Economy, Trade and Industry of Japan. The Seminar was attended by experts from eighteen countries in Asia and the Pacific, and representatives of thirteen organizations, namely: ESCAP, OECD, South Pacific Regional Environment Program (SPREP), UNDP, UNEP, GEF, UNFCCC Secretariat, WMO, ICLEI, JBIC, JICA, National Institute for Environmental Studies (NIES), and IGES. A number of resource persons from research institutes, universities, and private companies also attended the Seminar.

The broad objectives of the Seminar were to exchange information, experience and views on climate change. Specifically, the Seminar discussed the outcomes of the resumed session of the 6th Conference of the Parties (COP6), shared Intergovernmental Panel on Climate Change (IPCC) Third Assessment Reports (TAR), and discussed the incorporation of this knowledge into climate policy making. The participants emphasized that it is important to popularize the results of the IPCC to both government and private sectors. Some of the participants reaffirmed that the issues of the mitigation of climate change in developing countries depend very much on political, economical and social factors, and stressed the importance of international cooperative efforts including those by GEF, UNEP, UNDP and UNFCCC Secretariat. The importance of the involvement of experts of developing countries was also emphasized in preparing for IPCC Special Reports.

The Seminar also discussed and exchanged views on the Clean Development Mechanism and various ongoing national and international activities related to adaptation along with sharing the adaptation measures being carried out in countries in the South Pacific region. Participants emphasized the need for capacity building of the developing countries to understand CDM and its

potentials for sustainable development. Need for formulation of legal and institutional arrangements for CDM in host countries is emphasized in order to carry out CDM projects successfully on a commercial basis with careful consideration to local communities. Discussion also included the role of mangroves in coastal areas, lack of research and the need for practical guidelines/resource books on adaptation to the climate change. The importance of measures to address the impacts of extreme events was also raised

Exchanges of experiences on the preparation and support to the national communications in non-Annex I countries also took place in the Seminar, and measures taken by local governments to address climate change was discussed. Many participants shared the view that more financial and technical support would be needed to help Non Annex I countries to prepare their national communications. It was also considered essential to expand the communication networks and cooperative works through the Internet to facilitate the completion of national communications. The participants noted the importance of networking climate change experts in the region for exchanging their knowledge, such as APNET, and realizing "south-south co-operation." Participants pointed out that the initial investment required for climate policy measures was an important barrier for developing countries.

The 11th series of this Seminar was helpful in understanding various climate change related activities and sharing information, ideas and priorities in making climate policy.

Outline of the Seminar

Date: August 28-31 2001

Venue: Kitakyushu International Conference Center, Kitakyushu, Japan.

Sessions:

- Scientific works in IPCC third assessment report
- Sustainable Development and the Kyoto Protocol: Potential of CDM
- Adaptation measures in developing countries
- Promotion of the preparation of national communications under UNFCCC in Non-Annex I countries
- Asia Pacific Network for Climate Change
- Measures taken by local governments to address global warming and regional cooperation

VI. Workshops and Symposiums

A. IGES Open Forum

The IGES Climate Policy Project hosted "IGES Open Forum to Address Global Warming" three times in Tokyo during fiscal year 2001. The aim of the forum is to provide a venue for discussions in a wide variety of fields regarding the direction and establishment of domestic global warming countermeasures in Japan. The Kyoto Protocol faced a crisis that called its existence in question in 2001, when US President Bush announced US withdrawal from the Protocol. In the following Sixth Conferences of the Parties to the United Nations Framework Convention on Climate Change (COP6), held in The Hague and Bonn, great difficulties were faced in international negotiations. In such circumstances, Japan, with its crucial casting vote, has been attracting a lot of atten-

tion from around the world throughout the year. In Japan, there have been various discussions conducted within the government regarding future global warming countermeasures. There has been, however, a social demand has been expressed to establish a place for discussing global warming countermeasures from the point of view of the public, including representatives from private companies, NGOs and researchers. Responding to this demand, "IGES Open Forums" were organized from time to time to provide an opportunity to discuss important policy discussions of the time. IGES Open Forums have been successful, to some extent, in formulating public opinion in Japan towards ratification of the Kyoto Protocol through active discussions.

Outline of the Seminar

***IGES Open Forum to Address Global Warming 2002 Towards Implementation of the Kyoto Protocol-Recent US Actions and Japanese Responses**

Date: May 29, 2001

Venue: JA Bldg., Tokyo

Panelists:

Yurika Ayukawa (WWF Japan)

Ryokichi Hirono (Seikei University)

Tetsushi Ito (Toyota Motor Corporation)

Yukio Ishiumi (Information Technology Consortium Corp)

Naoki Matsuo (IGES)

Yoshio Shioya (Nihon Keizai Shimbun, Inc.)

***The First IGES Open Forum to Address Global Warming Part II-Establishment of Domestic Measures for Ratification of the Kyoto Protocol**

Date: October 16, 2001

Venue: Kasumigaseki Bldg., Tokyo

Panelists:

Isao Iwabuchi (Sky Aluminum Co. Ltd.)

Hideki Kato (Japan Initiative)

Naoki Matsuo (IGES)

Akio Morishima (IGES)

Tohru Morotomi (Yokohama National University)

Akihiro Sawa (Ministry of Economy, Trade and Industry)

Tsuneo Takeuchi (Ministry of the Environment)

***The Second IGES Open Forum to Address Global Warming Part II-Establishment of Domestic Measures for Ratification of the Kyoto Protocol**

Date: November 22, 2001

Venue: Fukoku Seimei Bldg., Tokyo

Panelists:

Akihiro Amano (Kwansei Gakuin University)

Taisuke Hamaoka (IBJ-DL Financial Technology Co. Ltd.)

Naoyuki Hata (Kiko Network)

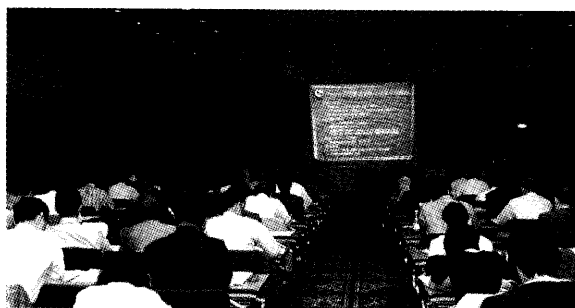
Teruaki Masumoto (Tokyo Electric Power Company)

Naoki Matsuo (IGES)

Shuzo Nishioka (IGES)

Tadashi Otsuka (Waseda University)

Taishi Sugiyama (Central Research Institute of Electric Power Industry)



May 29, 2001 Venue: JA Bldg., Tokyo



October 16, 2001 Venue: Kasumigaseki Bldg., Tokyo

B. Future of the Global Environment Facility (GEF)

A seminar for the Global Environment Facility (GEF) was held from 10 a.m. on March 19 2002 at the United Nations University in Shibuya, Tokyo, attended by 97 participants.

This seminar was organized as a follow-up to a seminar entitled "Financial Mechanisms for Global Environmental Conservation", which was also hosted by IGES in August 2001. The purpose of the seminar was to deepen understanding of GEF for facilitating participation in GEF by Japanese organizations and group.

The seminar started with a plenary talk by Dr. Alan Miller of the GEF Secretariat on the mechanisms of GEF

and cooperation with private companies and NGOs. This was followed by presentations by the implementing agencies: World Bank, United Nations Development Programme (UNDP) and United Nations Environment Programme (UNEP) and an executive agency: Asian Development Bank (ADB). Representatives from each agency introduced their involvement with GEF.

The outlines and programs of the seminars are as follows:

Outline of the Seminar

Date: March 19, 2002

Venue: United Nations University International Conference Hall

Organizer: IGES

Co-organizers: Ministry of the Environment of Japan, GEF

Supporters: World Bank, UNDP, UNEP, ADB

Program:

Presentation

Alan Miller (GEF)

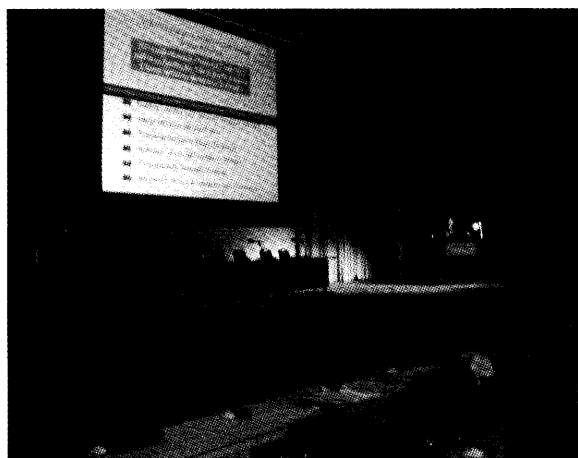
Presentations by Implementing Agencies and Executing Agency

Robin Broadfield (World Bank)

Nandita Mongia (UNDP)

Hideyuki Mori (UNEP)

Masami Tsuji (ADB)



C. Toyota Stakeholders' Dialogue

IGES served as the administrating secretariat for the First Toyota Stakeholders' Dialogue, held November 1-2, 2001 at the Pan Pacific Hotel Yokohama in Yokohama.

This conference was organized for the purpose of exchanging opinions by a few representatives each from NGOs, NPOs, universities and academic institutions, private foundations, auditing companies, private companies and consumers about roles to be played by private companies for realizing sustainable development. The

conference followed the style of "Stakeholder Dialogues", which is becoming popular in Europe and US.

The theme for the first conference was the "Role of private companies for Sustainable Development". Three sub-themes were also set-up: 1) Tasks for establishing sustainable and resource recycling societies, 2) Role of private companies for sustainable society in the twenty-first century, and 3) Communication between private companies and the society. Opinions were actively exchanged throughout the two days.

D. Policy Integration & Industrial Transformation Towards Sustainable Urban Energy Use for Cities in Asia: IGES/APN Mega-City Project Workshop and International Symposium on Sustainable Urban Development in Asia

The IGES Urban Environmental Management Project hosted an international workshop and symposium on the theme of "Policy Integration & Industrial Transformation Towards Sustainable Urban Energy Use for Cities in Asia." The workshop was intended as an opportunity to report on the research results of the last fiscal year, and together with the symposium, welcomed more than 80 participants from around the world, including researchers from institutes and universities, and administrators and urban planners in international organizations and local governments.

In the workshop, discussion was based on the report of the previous year's research output. In the symposium, presentations and panel discussions were held by central and local government officials, relevant specialists and researchers, helping to establish new links between research and practice through personal networks among participants. This workshop and symposium received supplementary funding support from organizations such as APN (Asia Pacific Network for

Global Change Research), START (Global Change System for Analysis, Research and Training) and UNEP-IETC (United Nations Environmental Programme / International Environmental Technology Center), Asahi Glass Foundation, and AEON foundation.



Transport in Shanghai

Outline of the Workshop and Symposium

Date: January 23-25, 2002

Venue: Rihga Royal Hotel Kokura, Kitakyushu, Japan

* January 23, 2002

Session (1): North Asia Study Group Report

Chair: Hidefumi Imura (Nagoya Univ./IGES)

Session (2): South Asia Study Group Report

Chair: A. P. Mitra (National Physical Lab.)

Future Scenario

Chair: Kebin He (Tsinghua Univ.)

* January 24, 2002

Presentation (1)

Chair: Tae Yong Jung (IGES)

Presentation (2)

Chair: A.P. Mitra (National Physical Lab.)

Presentation (3)

Chair: Xuemei Bai (Yale Univ./IGES)

Discussion on Possible Future Study

Coordinator: Richard C. Rockwell

* January 25, 2002

Inaugural Session

Activity Report Session (1):

IGES/APN Mega-City Project and ESCAP Kitakyushu Initiative Network

Chair: Richard C. Rockwell (Connecticut Univ.)

Activity Report Session (2): Local Practices and Needs

Chair: Masakazu Ichimura (ESCAP)

Activity Report Session (3):

Experiences of International Cooperation

Chair: Hidefumi Imura (Nagoya Univ./IGES)

Open Discussion: Policy Integration & Industrial Transformation towards Sustainable Urban Energy Use for Cities in Asia

Coordinator: Akio Morishima (IGES)

Panelists:

Jill Jaeger (IHDP)

Richard C. Rockwell (Connecticut Univ.)

Keisuke Hanaki (The Univ. of Tokyo)

Hideo Harasawa (NIES)

Peter J. Marcotullio (UNU/IAS)

Ram M. Shrestha (AIT)

Peter Droege (IEA SHC TASK 30)

E. Training Program: "Environmental Education Training for NGO Staff in Indonesia"

In order to promote environmental education in Indonesia, the Environmental Education Project has been organizing the "Environmental Education Training for NGO Staff in Indonesia" course since 1999. This course has been commissioned by Japan International Cooperation Agency (JICA). The third training course was organized from July 10 to August 12, 2001. Five trainees, who were representatives of NGOs in Indonesia, participated in the training course.

This training program aims: 1) to deepen understanding and knowledge of the environment and environmental education, 2) to improve the management abilities of NGO activities, 3) to build a network among the relevant NGOs in Japan and Indonesia, and 4) to obtain information and knowledge about practical activities on environmental education through visiting actual sites in Japan and promoting direct content, dialogue and interactions with related organization.

Different approaches of teaching and learning, such as lectures, field visits, observations and discussions, were adopted by the researchers and staff of NGOs in the training to ensure their active and responsible participation.

Since its first phase, the Project has emphasized the positive role of NGOs in fostering environmental education. Particularly, in order to foster environmental education in Indonesia, the Project has assisted the activities by Jaringan Pendidikan Lingkungan (JPL), which was established as a nationwide network of environmental education NGOs in 1996.

Through workshops, meetings action research and surveys, the Project has recognized the problems and constraints of NGOs and has identified sources to support environmental education in Indonesia. Similarly, the Project has also recognized useful resources available in Japan that could be provided to support NGOs in Indonesia.

Outline of the Training Course

Date: July 16 - August 10, 2001

Venue: IGES, Hayama and JICA Tokyo International Centre, Tokyo

Organized by: IGES and JICA

Schedule

July 16- July 20

Lectures in the IGES

July 23- July 24

Lectures on Computer Literacy

July 25- July 27

Sight trip for Environmental Education Facilities

July 30- August 1

Study Tour in KEEP, Yamanashi

August 2- August 3

Lectures on NPO Management

August 6- August 8

Study Tour in Minamata, Kumamoto

August 9-10

Lectures and Evaluation Meeting



JICA training Course- Keep Committee Guide walk

F. Environmental Reporting Seminars "Possible Influence of GRI Guidelines In Revision"

Environmental Reporting Seminars entitled "Possible Influence of GRI Guidelines In Revision" were held in Tokyo on March 4, and Kobe on March 8, 2001.

The seminars were intended to facilitate a discussion on the relationship between the GRI guidelines and actual corporate Environmental Reports. As the guidelines were in the revision process, it was deemed a good time to raise awareness of the Sustainability Report concept among the people concerned.

In the seminar, Mr. Toshihiko Goto of the Environmental Auditing Research Group gave a lecture on the background information and the current status of the GRI guidelines. Mr. Hidefumi Kurasaka of the Chiba University Faculty of Law and Economics, explained the details of the revision process.

After that, some business people in charge of environmental reports spoke on how they published their reports according to the GRI guidelines. CPAs with full knowledge on this matter made comments.

Many topics were discussed, such as the potential for

GRI to become the world standard, and how the revision of GRI guidelines will affect the corporate environmental reports publishing process. Particularly, business people expressed interest in how to adjust to the GRI revision demanding more economic and social information disclosure.

At both sites, many observers attended and a number of participants raised useful questions.



Outline of the Seminars

* Seminar in Tokyo

Date: March 4, 2002

Venue: JA Building, Tokyo, Japan

Lecture 1 "Outline of GRI Guidelines"

Toshihiko Goto, Environmental Auditing Research Group

Lecture 2 "Current state of the revisions process to GRI Guidelines"

Hidefumi Kurasaka, Chiba University

Panel Discussion

Coordinator : Akio Morishima, IGES

Panelists:

Toshihiko Goto

Hidefumi Kurasaka

Ryo Miyata, Kirin Brewery Co., Ltd.

Toshiyuki Matsuo, Ricoh Company, Ltd.

Ryoji Terada, ChuoAoyama Audit Corporation

* Seminar in Kobe

Date: March 8, 2002

Venue: Hyogo International Plaza, Kobe, Japan

Lecture 1 "Outline of GRI Guidelines"

Toshihiko Goto, Environmental Auditing Research Group

Lecture 2 "Current state of the revisions process to GRI Guidelines"

Hidefumi Kurasaka, Chiba University

Panel Discussion

Coordinator :

Akihiro Amano, Kansai Research Center, IGES

Panelists:

Toshihiko Goto

Hidefumi Kurasaka

Yoshiaki Arai, Matsushita Electric Industrial Co.,Ltd.

Seiichi Zenki, Sekisui Chemical Co.,Ltd.

Yasuhiro Watanabe, ChuoAoyama Audit Corporation

G. Seminar on Countermeasures Against Global Warming — COP 7 and the Future of Business Activities —

An agreement was reached on detailed application rules for the Kyoto Protocol at COP 7, held in Marrakesh, Morocco, in November 2001. Following this agreement, this seminar was held for the purpose of expressing opinions and holding discussions from the points of view of industries, academic circles and governments on how the Kyoto Mechanism which is soon to be implemented and future reforms of domestic systems may affect activities of private companies. Since the seminar took place in the midst of a trend when various activities are taking place for the ratification of the Kyoto Protocol, the seminar attracted about two hundred participants, which was more than the limit for participation.

In Part One, four lectures were presented consisting of professional analysis based on the latest information on the "Direction of Countermeasures Against Global Warming". In Part Two, the lecturers of Part One were joined by the coordinator. A discussion was held about introducing measures to be taken by private companies. A frank exchange called for support of voluntary actions taken by companies, and many opinions and questions about new business opportunities and the like were

aired. In a survey taken from the participants, many expressed the desire for more seminars on the theme of global warming issues to be held in the Kansai region in future.

This seminar was planned by the Climate Policy Project and the IGES Kansai Research Center, and was co-organized by IGES and Global Environment Forum-KANSAI, which has a wide variety of memberships from industry, academic circles and governments in the Kansai region.



Outline of the Seminar

Date: January 24, 2002

Venue: Hankyu Grand Building, Osaka, Japan

Organized by Institute for Global Environmental Strategies and Global Environment Forum-KANSAI

I. Lecture: Direction of Countermeasures against Global Warming

1. Trend of Japanese institutions

- * Lecture 1 "Outcome of COP 7 and trends of domestic institutions"

Ryutaro Yatsu, Asia-Pacific Network for Global Change Research

- * Lecture 2 "Options of domestic policy"

Hidenori Niizawa, Kobe University of Commerce

2. Concrete figure of the Kyoto mechanism (international trend)

- * Lecture 3 "Working rules of the Protocol and their aspects for business"

Naoki Matsuo, IGES

- * Lecture 4 "Methods to estimate GHG and its verification"

Takuya Ogushi, ChuoAoyama Audit Corporation

II. Discussion: Influence of the Kyoto Mechanism on Corporate Activities

Coordinator:

Akihiro Amano, Kansai Research Center, IGES

Panelists:

Ryutaro Yatsu

Hidenori Niizawa

Naoki Matsuo

Takuya Ogushi

Taiichiro Suda, Kansai Electric Power Co., Inc.

Nobuhisa Ito, Matsushita Electric Industrial Co., Ltd.

H. Relay Symposium on the Century of the Environment

IGES organized a relay symposium on the "Century of the Environment" to mark the beginning of the twenty-first century, which is called the Century of the Environment.

There is a need for mankind to switch from a society based on mass-production, mass-consumption, and throw-away economics, which was commonly found in industrialized nations in the twentieth century, to a recycle-based society. The relay-symposium was held three times to discuss what mankind can do to make this switch possible, and what roles should be played by governments, companies, NGOs, and citizens.

The first symposium was on "Making of Strategies for the Country of Wa". (editor's note: Wa or Harmony is an ancient name for Japan). Discussions were held on concrete policy methodologies based on grasping the current situation of what can be done for establishing the

"Country of Wa", by critically changing conventional economic activities and lifestyles.

The second symposium was on "Communication between Business and the Environment". The topic was on how businesses can respond to changes of situations regarding environmental communications, responding to the recent tendency that companies are asked even more to disclose environmental information.

The third symposium was on "Future Challenges for Business--A Global Warming Mitigation Perspective". In order to promote global warming measures for the ratification of the Kyoto Protocol, discussions were held from the point of view that innovation or structural reforms of private companies are good opportunities for business. Ideal corporate actions which are called for in the twenty-first century were examined.



1st Symposium (June 22, 2001)



3rd Symposium (Feb. 20, 2002)

Outline of the Symposiums

* 1st Symposium

Date: 22 June, 2001

Venue: Shonan Village Center

Panelists:

Akio Morishima (IGES)

Keith Bezanson (Institute of Development Studies, University of Sussex, UK)

Peter E. de Janosi (LEAD International, USA)

Hoesung Lee (Council on Energy and Environment Korea, Korea)

Tongroj Onchan (Mekong Environment and Resource Institute, Thailand)

* 2nd Symposium

Date: 19 December, 2001

Venue: Kanagawa Small and Medium Sized Enterprise Center

Panelists:

Hidefumi Kurasaka (Chiba University)

Yuko Koike (Chuo Aoyama Audit Corporation)

Toshihiko Goto (Environmental Auditing Research Group)

Takeshi Tsuruta (Sony Corp.)

Yoko Beppu (Himeji Institute of Technology)

* 3rd Symposium

Date: 20 February 2002

Venue: 501 Pacifico Yokohama

Coordinator:

Akio Morishima (IGES)

Panelists:

Tadahiro Mitsuhashi (Chiba University of Commerce)

Tongroj Onchan (Mekong Environment and Resource Institute)

R.T.M. Stamihardja (Bogor Agricultural University, Indonesia)

Edson K. Kondo (UNU/ Institute for Advance Studies)

Jan-Dirk Seiler-Hausmann (Wuppertal Institute for Climate, Environment and Energy)

VII. Opening of the Kansai Research Center

The IGES Kansai Research Center was established in June 2001 as a new activity center of IGES. It has been conducting activities on the theme of "Industries and the Environment", while working closely with industrial, academic, and governmental organizations of the Kansai region. For the initial three years, strategic research focusing on the project of "Business and the Environment" will be carried out. This research will deal with environmental conservation actions taken by the private sector, on three themes: environmental accounting, environmental information disclosure, and environmental valuation. At the same time, various joint research and projects are conducted with other IGES projects, and also in the fields related to industries and the environment. Activities are carried out aiming at autonomous transformation of industrial structures and creation of new business styles consistent with environmental conservation.

1. History Leading to the Opening

The IGES Kansai Research Center opened at the start of the IGES Second Phase Strategic Research, in the central district of the new development area called "Kobe New Eastern City Centre" in the city of Kobe in Hyogo Prefecture. This area had been developed as a symbolic reconstruction project from the Great Hanshin-Awaji Earthquake. The International Health Development Centre (IHD) Building which houses the IGES Kansai Research Center also houses other international research organizations of health, environmental and disaster prevention, including World Health Organization (WHO) Kobe Centre, Asia Pacific Network for Global Change Research (APN) Centre, International Environmental Management of Enclosed Coastal Seas (EMECS) Center, Asian Disaster Reduction Center (ADRC), United Nations Centre for Regional Development (UNCRD) Disaster Management Planning Hyogo Office, and the UN Office for the Coordination of Humanitarian Affairs (OCHA). Other institutions being opened in the neighbourhood include International Students House, Hyogo International Centre of Japan International Cooperation Agency (JICA), Hyogo Prefectural Museum of Art, and the Disaster Reduction and Human

Renovation Institution. These institutions aim to contribute to solving issues regarding "health, environment, safety, welfare, and culture that support the dignity of "life", for creative reconstruction from the earthquake.

In a curious coincidence, a report was submitted to Prime Minister Murayama by his Ad Hoc Commission on Global Environment in the 21st Century on January 17, 1995, which was the day of the Great Hanshin-Awaji Earthquake. In a process for choosing the site for the IGES Headquarters in response for the report, Hyogo Prefecture proposed to establish IGES in the IHD Centre Building in the Kobe New Eastern City Centre. This proposal was among the final five candidates, along with Kanagawa Prefecture and the City of Kitakyushu. However, Shonan Village of Kanagawa Prefecture was chosen as the location for the IGES Headquarters. Following negotiations by IGES and the Hyogo Prefectural Government, it was decided to open a new IGES activity center in the Kansai region where there are many academic institutions, organizations and private companies with an interest in environmental issues. The decision was approved at the Meeting of the Board of Directors in February 2000, and the Kansai Research Center began full scale activities following the Opening Ceremony in June of the same year.

Dr. Akihiro Amano, then professor at Kwansei Gakuin University, was chosen as the first director of the IGES Kansai Research Center. Dr. Amano is also a director of IGES. The initial staff members included five full-time and six part-time members, under the project leadership of Dr. Katsuhiko Kokubu, a professor at Kobe University Graduate School of Business Administration. Dr. Kokubu is the Project Leader of the IGES Business and the Environment Project. The number of visiting researchers and collaborators has gradually increased, and the center is expanding its activity networks. Moreover, the IGES Kansai Research Center is strongly supported by the Hyogo Prefectural Government, and has enjoyed strong cooperation from private companies and organizations in Kansai in its establishment and administration. Most members of the research and administrative staff in the center are dispatched from Hyogo Prefectural Government and from private companies in

Kansai. They conduct practical strategic research, taking full advantage of their individual expertise and backgrounds.

2. Report of Activities in FY2001

The IGES Kansai Research Center conducted various activities related to the "Business and the Environment Project" in FY2001 (please see reference), as well as research and publication activities on "Industries and the Environment", which is the main theme of activities at the center. Various events and projects such as the Seminar on Countermeasures against Global Warming--COP7 and the Future of Business Activities-(see reference) were carried out, in collaboration with other projects of IGES and with research institutions, academic circles, and organizations of specialists. Here is a brief outline of the Opening Event and other projects conducted jointly with external organization:

1) Inaugural Project "International Forum 2001 on "Business and the Environment"

In commemoration of the opening of the Kansai Research Center, "International Forum 2001 on "Business and the Environment" was held on September 26-27 2001, at Shinkobe Oriental Hotel. An international symposium on "Sustainable Management" was held on the first day, and a workshop on "Environmental Accounting" was held on the second day. Experts on environmental management from Japan, UK, Korea, Australia, the Philippines, and Indonesia held discussions on corporate efforts towards sustainable development and future management strategies.

a) International Symposium on "Sustainable Management"-Global Trends of Sustainable Management

Voluntary corporate activities such as the introduction of the ISO14000 series, environmental reporting, environmental accounting, and green purchasing are developing worldwide in western countries, Japan and the Asia-Pacific region. The symposium was attended by some 200 participants, mainly from private companies. Discussions were held, highlighting a social environment in which the number of corporate activities for "environmental manage-

ment" is rapidly increasing, and on consequent changes in corporate management strategies towards creating an environmentally friendly society. Cases were introduced from UK and Korea, as well as comments from panelists representing financial service industry and NGOs. Then there was a discussion on the content and challenges of environmental management, and how those challenges may be overcome. (Coordinator: Katsuhiko Kokubu, Project Leader of the Business and the Environment Project, Kansai Research Center)

b) International Workshop on "Environmental Accounting"-Inauguration of Environmental Management Accounting Network-Asia Pacific (EMAN-AP)

Environmental Management Accounting is considered as one of the most important tools for realizing "sustainable management." For introducing the current status in the region, presentation of research results, and exchange of opinions and information, some 80 experts and researchers from the region came together to examine how to refine each methodology. Methods for spreading the methodologies within the region were also studied.

On this occasion, the Environmental Management Accounting Network - Asia Pacific (EMAN-AP) was established for the purpose of continuous exchange of research results and information in the related field.

2) Joint Research with Wuppertal Institute for Climate, Environment and Energy, Germany (Hosting of a Visiting-Researcher)

IGES hosted Dr. Jan-Dirk Seiler-Hausmann from Wuppertal Institute for Climate, Environment and Energy as a Visiting Research Fellow. For three months, Dr. Seiler-Hausmann was engaged in a joint-research on corporate innovation strategies for sustainable development. On the theme of "Japan-Germany Comparison of Corporate Technology Development Strategies for Sustainable Development", he conducted interview surveys, with other members of the Kansai Research Center, of people in charge of environment or tech-

nology development in companies. At the same time, he has given lectures several times on the scenario for improving environmental efficiency, based on "Factor 4" and "Factor 10" of the Wuppertal Institute for Climate, Environment and Energy.

3) Asia Forum at the 5th International Conference on the Environmental Management of Enclosed Coastal Seas (EMECS 2001)

As a Special Session for EMECS 2001, the IGES Kansai Research Center co-organized a forum with the International Center for the EMECS and APN. (Date: 20 November 2001 Venue: Portpia Hotel (Kobe) Number of Participants: About 200) The current status of coastal areas (metropolis, ecology, water quality, etc.) of the Asia-Pacific region and political perspectives (actual cases and scenario for the future) were reported and discussed. It was pointed out through the discussions that comprehensive environmental assessment of the region is important and necessary.

3. Future of the IGES Kansai Research Center

1) Promotion of Network Building

Reflecting on the activities of the past year, the "Business and the Environment Project" has been conducting mainly analysis of current status and survey of trends, and has made notable progress in establishing a firm foundation for strategic research towards making policy proposals. In other activities of the Kansai Research Center, networks have been built with other projects of IGES and with other related organizations, and the center had a good start as a basis for future activities. For carrying out strategic research, it is essential for the center to expand its networks with organizations, groups and businesses both within and outside Japan in future, to gather information, grasp needs of stakeholders, and to exchange and disseminate information and research results.

The Kansai Research Center has been holding Advisory Group for the IGES Kansai Research Center once or twice every year, beginning even before the Kansai Research Center was estab-

lished. The Kansai Research Center receives advice and supervision for activities of the center from this group, which consists of members of organizations, private companies, and industrial, academic and government experts, mainly of the Kansai region. The center hopes to continue expanding its network, with the support of the group members.

2) Wider Approach to Industrial and Environmental Issues

A large number of private companies are seeking ways of responding to environmental issues or voluntarily taking actions for environmental issues. Some are seeking new business opportunities related to environmental issues. These companies have a wide range of interests and expectations for the IGES Kansai Research Center, which was founded with the research theme of "Industries and the Environment". In addition, the Hyogo Prefectural Government and other local governments are demanding IGES to play a leading role in international cooperation in the area of the environment or in developing advanced and effective environmental policies.

The IGES Kansai Research Center has not been in operation for long, and therefore, is capable of managing only a few things at the moment with its resources and experience. In future, however, the Kansai Research Center considers it one of its major tasks to become an organization which can carry out activities that meet the practical needs of businesses. In order to do so, it is essential to work closely with other projects of IGES, and to strengthen ties with organizations and private companies within and outside Japan, which is possible through the expansion of the network.



VIII. Other Activities

A. Information Dissemination

Through various kinds of media including printed publications and websites, IGES disseminated information on current activities and scientific research achievements. IGES also analyzed, processed and disseminated the latest information concerning policy trends and trends in international and regional debate in relation to global environmental issues throughout the world.

1. Establishment of Public Relations Strategies

IGES set up an in-house Public Relations Group to provide information efficiently to various target groups. In cooperation with the IGES research projects, IGES established a system to issue newsletters and other publications, based on the communication strategy indicated in the Second Phase Strategic Research Program.

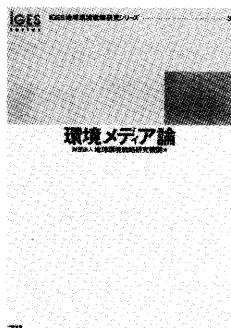
2. Information dissemination through publications

1) Commercial publications

- **Environment and Media Studies (Environmental Education project)**

This book includes an examination of the role to be played by the media in environmental issues and education.

As the third in a series entitled IGES Global Environmental Strategic Research, it was published by Chuohoki Publishers in October 2001.



- **Environmental View in the 21st Century - Environmental Evolution**

This book targets the general public and students who are interested in environmental issues. It analyzes basic issues concerning the global environment and presents the basic challenges for global environmental conservation and various environmental policy approaches. It was published by Tokyo Shoseki in February 2002.

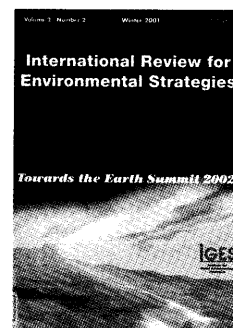
- **Kyoto Protocol - International Climate Policy in the 21st Century**

In order to deepen Japanese people's understanding about the Kyoto Protocol, the Center for International Environmental Law and IGES translated Kyoto Protocol - International Climate Policy in the 21st Century, authored by S. Overture and H. E. Otto, into Japanese. It was published by Springer-Verlag Tokyo Inc. in July 2001.

2) Periodical publications

- **International Review for Environmental Strategies (IRES)**

In order to disseminate results and information of strategic research to address global environmental issues, IGES has published an English journal named International Review for Environmental Strategies (IRES) biannually (first issued in August 2000). Summer and winter issues were published in FY 2001, and in particular the winter issue contained papers written by experts about WSSD.



- **Top News on the Environment in Asia**

"Top News on the Environment in Asia" has been continuously published since 1998. The 2001 issue was a compilation of information on important environmental news regarding the Asia-Pacific region with cooperation from 16 countries and 3 institutes.

- **Newsletter "What's New from IGES"**

A newsletter was issued three times, through which IGES provided information on its activities and achievements for researchers in institutes, companies, NGOs and the public throughout the world.

Circulation: 1,000 copies-English version, 1,500 copies-Japanese version

3. Dissemination of information via the internet

IGES disseminated topics on global environmental issues and the latest information about its research activities via bimonthly "E-alerts", an information dissemination system using e-mail, which started in December 2000 on a trial basis. Around 3,000 members registered for the "E-alerts" mailing list.

As for the IGES website, an in-house preparatory working group, which consists of research members who are in charge of each project website, was established for improving content and easy access to information for users. In 2002, the IGES website is scheduled to be renovated in order to provide greater convenience and more information.

B. Affiliate Membership — Seminars for Affiliate Members —

On a daily basis, IGES has been strengthening its cooperative ties with various organizations such as national and local governments, businesses and NGOs, as the ultimate goal of IGES is to "implement its research results."

IGES has been providing its affiliate members opportunities to attend its symposiums and other meetings, and to receive publications free of charge. In addition, IGES has been organizing well-attended seminars, targeting mainly the affiliate members.

IGES holds these seminars entitled "IGES Seminars for Affiliate Members / Open Seminars" for the purpose of increasing its membership by publicizing its activities, and they are therefore open to the public as well.

In FY 2001, a series of seminars were held targeting three groups: the general public, governments, and businesses. Actions that should be taken by each of these groups towards the common theme of global environmental issues have been studied. Lively discussions

by a large number of participants took place throughout the series, which started with a plenary seminar and ended with a comprehensive seminar that was the last of the twelve seminars.

IGES has the total of 18 corporate members, 2 NGO members, and 89 individual members as of March 31, 2002. There have been a few increases in corporate and individual memberships.

From FY2002, an Associate Affiliate Membership has been established, in addition to the Conventional Affiliate Membership. The Associate Affiliate Members will receive fewer benefits than the Affiliate Members, for half the Affiliate fee. This category was established to expand overall membership. Furthermore, the additional classification of Student Members will be established for both Affiliate Members and Associate Affiliate Members to offer opportunities for students to become IGES members at inexpensive student rates.

Seminars and Open Seminars for IGES Affiliate Members in FY2001

Plenary Seminars

Dates	Themes and Programs	Lecturers and Presentators		Venue
10 Oct.	On Global Environmental Issues			Yokohama Queen's Tower
	What are Global Environmental Issues-For Governments, Businesses and the Public	Akio Morishima	Chair of the Board of Directors, IGES / President, Central Environment Council	
	Report: I Measures Taken by Local Governments	Yukio Shimada	Kanagawa Prefectural Government	
	Report: II What the Industrial Circle Thinks About Global Warming	Isao Iwabuchi	Sky Aluminum Co. Ltd.	
	Report: III Global Warming Issues-Measures Taken by the Public	Mie Asaoka	Kiko Network	
	Panel Discussion	Akio Morishima and others		

Seminars for the General Public

Dates	Themes and Programs	Lecturers and Presentators		Venue
13 Nov.	On Energy-Saving Lifestyles			Yokohama Landmark Tower
	Plenary Talk: Energy-Saving in Daily Lives	Takeo Sawada	The Energy Conservation Center	
	Report I: Hints for Changing Your Lifestyle to Energy-Saving Style	Kazuko Sato	(NPO)Soft Energy Project	
	Report II: How Environmentally Conscious is Your Household?-Measuring by Environmental Book Keeping	Tomio Horikawa	Kanagawa Prefectural Government	
	Floor Discussion			
27 Nov.	On Eco-Conscious Shopping			
	Report: Environmental and Social Contributions by AEON	Seiichi Ueyama	AEON Co., Ltd.	
	Plenary Report I: What You Can Do When You Shop-Let Us Change the Society by Shopping Right	Ikuko Yano	Green Consumer Research Group	
	Plenary Report II: Knowing Eco-Friendly Products	Hiroyuki Sato	Green Purchasing Network	
11 Dec.	On Life Without Garbage and Life Which Does Not Produce Garbage			
	Plenary Report: Reducing Household Garbage	Akiko Takada	Kamakura City Fueda Recycling Center	
	Report I: Measures Taken by Local Governments to Reduce Garbage	Hirofumi Kato	City of Odawara	
	Report II: Measures Taken by Seven-Eleven	Hidekazu Yamaguchi	Seven-Eleven Japan Co., Ltd.	
	Floor Discussion			

Seminars for Governments

Dates	Themes and Programs	Lecturers and Presentators		Venue
19 Nov.	On Environmental Performances by Local Governments			Yokohama Landmark Tower
	Plenary Report: Environmental Reporting and Environmental Accounting--Measures Taken by Local Governments	Koichiro Saio	Chuo Sustainability Research Institute Corporation	
	Report I: Environmental Reporting in Sendai City	Masaki Sato	City of Sendai	
	Report II: Environmental Accounting in Yokosuka City	Masao Hattawa	Yokosuka City	
	Floor Discussion			
5 Dec.	Local Governments and Global Environmental Issues			Yokohama Landmark Tower
	Introduction	Akio Morishima	IGES / Central Environment Council	
	Local Governments and Global Environmental Issues--From the Point of View of Governance	Yohei Harashima	Takushoku University	
	Asian Cities and Energy-From Calculation Methods for GHG Emissions	Shinji Kaneko	IGES Urban Environmental Management Project	
	Point of View of Environmental Education by Local Governments	Masahiro Takahashi	IGES Environmental Education Project	
20 Dec.	Local Governments and ISO14001			Yokohama Queen's Tower
	Plenary Talk: Significance for Cities for Acquiring ISO14001	Takeshi Narasaki	TNS Co., Ltd.	
	Report I: ISO14001 of Yokosuka City	Tsutomu Ota	Yokosuka City	
	Report II: ISO14001 of Kanagawa Prefecture	Hideaki Hayashi	Kanagawa Prefectural Government	
	Floor Discussion			

Seminars for Businesses

Dates	Themes and Programs	Lecturers and Presentators		Venue
15 Nov.	On Energy-Saving Lifestyles			Yokohama Landmark Tower
	Plenary Talk: Current and Future Response to Energy-Saving Policies	Hisakazu Tsujimoto	The Energy Conservation Center	
	Report I: Implementation of Cost-Minimization by Target Management	Masaharu Kurishima	NEC Corporation	
	Report II: Promotion of PDCA Energy in the Daiwa House Building	Hiroyuki Shoji	Daiwa House Industry Co., Ltd.	
	Floor Discussion			
29 Nov.	On Environmental Reporting and Environmental Accounting			Kanagawa Small-and-Medium Sized Enterprise Center
	Plenary Talk: Significance of Environmental Reporting and Environmental Accounting	Ryoji Terada	ChuoAoyama Audit Corporation	
	Report I: How Environmental Reporting and Accounting are Positioned in Today's Society	Yoshisato Minagawa	Fuji Photo Film Co., Ltd.	
	Report II: Environmental Management of Sony Corporation	Hiroyuki Tada	Sony Corporation	
13 Dec.	On Evaluation Programs for Environmental Activities			Yokohama Landmark Tower
	Plenary Talk: Environmental Management in Small and Mid-sized Businesses	Ken Morishita	Eco-Management Institute	
	Report I: What is a Evaluation Program for Environmental Activities	Shigekazu Kobayashi	Kanagawa Environmental Counselors Association	
	Report II: Measures Taken by Akasaka Tec Inc.	Joji Miyashita	Akasaka Tec Inc.	
11 Jan.	On Environmental Management Systems			Yokohama Landmark Tower
	Plenary Talk: Significance of Acquiring ISO14001	Takeshi Narasaki	TNS Co., Ltd.	
	Report I: ISO14001 of JSIC Corporation	Yodai Onishi	JSIC Corporation	
	Report II: For Acquiring ISO14001	Koichiro Matsumura	Sanko Bldg Service Co., Ltd.	
	Floor Discussion			

Comprehensive Seminars

Dates	Themes and Programs	Lecturers and Presentators		Venue
29 Jan.	On Dealing with Global Warming Countermeasures-For Ratification of the Kyoto Protocol			Yokohama Queen's Tower
	Plenary Talk: Evaluation of COP7 and the Direction that Should be Taken by Japan	Akio Morishima	IGES / Central Environment Council	
	Plenary Report: Measures Taken for the Ratification of the Kyoto Protocol	Hitoshi Kometani	Ministry of the Environment, Japan	
	Panel Discussion	Akio Morishima	IGES / Central Environment Council	
		Hitoshi Kometani	Ministry of the Environment, Japan	
		Kazuo Takai	Kanagawa-ken Employers' Association	
		Michio Takaku	Kanagawa Prefectural Government	
		Kazuko Sato	(NPO) Soft Energy Project	

C. Move to the New Research Facility

Since its inauguration in March 1998, IGES Headquarters had been based in the Research Wing of Shonan International Village Center (SVC), which is located in Shonan Village in Hayama, Kanagawa Prefecture. However, to meet the needs of our expanding research activities, the Headquarters will move into a purpose built research facility very close to SVC in June 2002, with the full support of Kanagawa Prefectural Government.

The new research facility occupies an area of 20,000 square meters, and has a 7,400 meter floor space. The building is constructed mainly of steel and glass, and is very modern in design. It features two floors above ground and one below. The facility features Project Rooms, Secretariat, Library & Information Center, Board Members' Rooms, five conference rooms including two with simultaneous interpretation facilities, Cafeteria, accommodation facilities which can be used by all researchers and an atrium which extends through the whole building, from the basement floor to the second floor. The facility was designed by Nikken Sekkei Ltd., and construction was undertaken by the Joint-Enterprise for the Construction of the IGES Research Facility, consisting of Kajima Corporation, Mitsui Construction, and Kobai Co., Ltd. The facility is owned by the Kanagawa Public Corporation for Housing, and IGES will occupy the facility as a tenant.

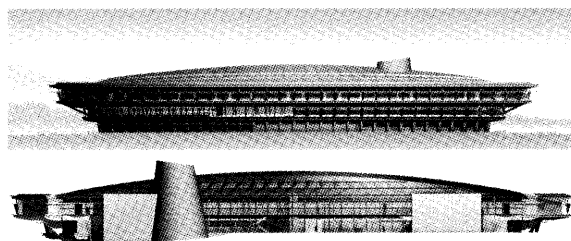
Reflecting the IGES research goal of preserving the global environment, the building not only provides researchers with a comfortable working environment, but it incorporates a number of features in its design, facilities and construction materials to ensure harmony with the environment.

In contrast to existing buildings, which use air conditioning systems that consume a large amount of energy to produce a man made environment cut off from the natural surroundings, the basic principle behind this building is to use the blessings of nature to create a suitable research environment while keeping energy waste to a minimum. For example, the Miura Peninsula, where the IGES Head Office is situated, is blessed with sunshine throughout the year. This is the reason for making the whole wall out of glass, and letting the light in

through the ceiling. For cutting off warm and disturbing light from the west, wide louvers have been set up. The louvers are designed to let in the reflected light into the rooms as far as possible, so that natural light may accommodate 70% of necessary lighting during the daytime. Regarding wind ventilation, the building utilizes wind blowing from the sea, and effectively uses the outer air inside the building for ventilation and air-conditioning. Moreover, a part of the roof is covered with plants, in order to prevent direct heat from sunshine. The vaporizing effect of the plants is also used for cooling the building. In the basement, cool heat trenches have been dug, and the air flowing through the trenches is used as a medium for cooling and heating the building, using the temperature difference above and below ground.

Concerning facilities, solar panels have been attached on the roof, which are capable of generating 55kws of electricity. In addition, micro gas turbines have been placed as additional onsite generators for provision of energy. Besides these generating facilities, electricity consumption during the daytime power demand peaks may be reduced by the use of new devices developed for the efficient use of energy, including sodium sulfur (NAS) batteries and an ice heat storage system that uses ice stored during the nighttime for air-conditioning during the daytime. By using these devices, the energy being used is standardized, and energy purchased externally may be reduced as much as possible. Regarding water, rain water is recycled and used for flushing toilets or watering the plants in the garden.

Regarding the building materials, gum trees that are usually thrown away, or recycled wood made mainly from wood powder, is used instead of real wood. Tiles for the floor are made from recycled glass. Thus the building uses as many recycled materials as possible.



In the area around the building, greenery that matches the local ecosystem has been planted, and the use of chemicals will be restricted as much as possible. A brook using recycled rainwater has been crafted, and the whole garden will serve as an ecosphere surrounding a waterside environment, where it is possible to support many varieties of living creatures.

Through such efforts, the new research facility of IGES Headquarters hopes to become a model for environmentally friendly buildings, which all future buildings should aim to become.

D. Formulation of the Mid- and Long-term Business Plan and Promotion of Further Internationalization of IGES

Since its foundation, IGES has retained the characteristics of an organization that conducts comprehensive and innovative strategic research as an independent "international organization", for the purpose of effectively carrying out international activities from a neutral standpoint, with collaboration from various stakeholders, apart from particular standpoints or interests such as those of nations. For this purpose, IGES should examine a mid- and long-term plan targeted five or six years ahead. As part of the plan, IGES also needs to examine the Third Phase Strategic Research Program from an early stage.

It is necessary that IGES should have a structure for conducting joint projects with national and local governments, private companies, research organizations both in and outside Japan, and also with the United Nations. The structure should also allow IGES to realize its strategic research in neutral and effective ways. Therefore, it is considered appropriate that, in future, IGES should become an independent organization with international characteristics such as an international organization founded by a convention. For IGES to accomplish its purposes set at the time of its establishment, it is essential that IGES should become recognized as an international organization from the international society. This is the reason why it is necessary for IGES to systematically advance its internationalization.

To prepare for the process, internal examinations were carried out in FY2001. The results were discussed at the Informal Meeting of Directors and Trustees which was held in June 2002. The Mid- and Long-term Business Plan is scheduled to be approved in the Meeting of the Board of Directors in June 2003. Regarding the Third Phase Strategic Research Program, it will be examined further for approval at the Meeting of the Board of Directors in February 2004. As for the initial step taken for further internationalization, the possibility of IGES to start accepting contributions before the end of the Third Phase will be examined.

(Reference)

The following is the result of internal examinations of the Mid- and Long-term Business Plan and of the plan

for further internationalizing IGES. More concrete examinations will be conducted in future, based on these results.

1. Outline of the Mid-term Business Plan

A concrete target shall be established in the Mid-term Business Plan targeting four or five years ahead. The plan shall describe the measures and budget for accomplishing the plan and set up an annual schedule.

For the time being, it should be considered that there will not be a large change in the current budget scale. Therefore, the current number of projects will be considered as a standard number of projects in the mid-term plan. The project themes will also be selected, based on the results of projects in the First and the Second Phase.

The following items of examination will be included in the Mid-term Business Plan.

1) About research work

- a) Appropriate Research Management of Evaluation of Research
- b) Making More Use of Competitive Funding
- c) Improvement of Research Methodology and Selection of Research Themes

2) Work related to training and information

Regarding collection and distribution of information, the following points should be steadily implemented.

- a) Influencing of external parties by steady implementation of communication strategies and promotion of recognition of IGES
- b) Systematic collection of information (including existing research results and statistic data concerning global environmental issues) on environment and development or other related information in Asia-Pacific by organization and development of an IGES website and a database system, as well as expansion of IGES's function as a center of excellence for environmental information
- c) Provision of reliable information such as by establishment of a publication policy

- d) Improvement of Top Environmental News in Asia, and timely and periodical dissemination of information such as E-alerts, newsletters, annual reports, and the Environmental White Paper for Sustainable Development in the Asia-Pacific Region (IGES White Paper).

3) Training

- a) Improvement of the e-Learning system and production of more course contents through cooperation with International Environmental Technology Centre for the United Nations Environmental Programme (UNEP/IETC)
- b) Organization and improvement of training courses, and acceptance of more trainees, in collaboration with other organizations and programs such as the United Nations Institute for Training and Research (UNITAR), Eco Fellows, Leadership for Environment and Development (LEAD) and Japan International Cooperation Agency (JICA).

4) Increasing effectiveness of work administration

- a) Use of the New Building
- b) Environmental Consideration at Work

5) Plans for budgeting, balancing, and funding

6) Effective formation and use of organization and personnel

- a) Research Structure
- b) Secretariat Structure

2. Establishment of Long-term Business Plan

Based on the experience of the First and Second Phase, evaluation of research results will be conducted from the point of view of sustainable development. Evaluation of research administration by project method will be conducted. The project method, number of projects, and how to select the projects, as well as the duration of the research period and the system of limited-term employment etc., will be examined. At the same time, there will be a thorough examination for the possibility of receiving external funds for IGES.

3. Towards Promotion of Further Internationalization

As the Long-term Business Plan is formulated, the further internationalization of IGES will be examined. To

formulate the Second Phase Strategic Research Program, the Program Planning Group consisting of Directors and Trustees of IGES has compiled a report (June 2000). For further internationalization, the report emphasizes that IGES should exchange opinions with signatory organizations of the IGES Charter and that the following points should be considered:

- Building of international strategic partnerships with other research organizations*
- Internationalization in the aspects of research targets, directions, and researchers

Moreover, the report says that organizational internationalization should be realized in the early stages of the Third Phase through the introduction of funding from international funding agencies, implementation of joint projects, and recruitment of international research staff. For this purpose, the report points out that necessary preparatory work should begin in the Second Phase.

Taking these into consideration, internal examination has been carried out in FY2001 regarding the promotion of further internationalization of IGES. The above mentioned report, as well as that of the Ad Hoc Commission on Global Environment in the 21st Century should be referred to when executing the internationalization of IGES.

1) Clarification of the status that should be aimed at as an international organization

It seems appropriate that IGES will initially aim to be an "international domestic organization" like International Union for Conservation of Nature and Natural Resources (IUCN), so that it may expand its networks such as by increasing signatory organizations, and maintaining flexible research systems and budgets. The Meetings of Boards of Directors and Trustees will examine this in future. In order to do so, the Charter for the Establishment of IGES may be revised, when necessary.

2) Organization of the functions of IGES as an international organization

It seems that it is necessary to make responses for the following points from now on:

- a) Making proposals at international conferences and submitting reports to Environment Congress in Asia (ECO ASIA), UN/ESCAP, APFED

- b) Introduction of funds and contributions from international funding agencies and national governments
- c) Promotion of joint research and securing of funds
- d) Promotion of Exchange with Other Research Institutions such as Internship etc.
- e) Recruitment of international research staff and improvement of system to accept researchers from abroad
- f) Training functions, and collection, organization and dissemination of information
- g) Setting up of new branch offices to influence policies and to promote dialogues with developing countries

APPENDIX



List of Achievements (April 1, 2001 — March 31, 2002)

1. Commercial Publications

IGES Secretariat

The Age of Environmental Revolution : Introduction to Environment in the Twenty-first Century (2002) Tokyo, Tokyo Shoseki, 279 pp. (in Japanese)

The Kyoto Protocol : International Climate Policy for the 21st Century (2001) S. Oberthuer, H. E. Ott / Translated by IGES, Japan Center for International and Comparative Environmental Law, Tokyo, Springer-Verlag Tokyo, 438 pp. (in Japanese)

Environmental Education Project

Media and the Environment (IGES Series 3) (2001), Tokyo, Chuohoki Publisher, 308 pp. (in Japanese)

2. Reports published by IGES

IGES Secretariat

2001 Top News on Environment in Asia (2001), 124 pp.

IGES Annual Report FY2000 (2001), 137 pp.

International Review for Environmental Strategies, Volume 2 Number 1, Summer 2001 (2001), 192 pp.

International Review for Environmental Strategies, Volume 2 Number 2, Winter 2001 (2001), 172 pp.

The Second Phase Strategic Research Program : April 2001-March 2004 (2001), 162 pp.

Comprehensive Report of the First Phase Strategic Research (2002), 145 pp.

Climate Policy Project

Climate Policy Dialogue in Asia October 2001 : (2001), 18 pp.

A Proposal on Domestic Climate Policies and Measures in Japan : Strategic Design for Japanese Companies to be a Winner in the Climate Businesses (2002), 171 pp.

A Proposal on Domestic Climate Policies and Measures in Japan : Strategic Design for Japanese Companies to be a Winner in the Climate Businesses (2002), 167 pp.

Implications of Baltic Environmental Policies for East Asia (2002), 260 pp. (Report for commissioned work for Ministry of Environment)

Policy Design of Climate Change Collaboration in Northern Asia : Possible Options and Constraints for Cooperative Effort between Russia, Japan, China and Korea (2002), 315 pp.

Proceedings of IGES Workshop on Climate Policy in Asia, Dec. 17-18, Shinagawa Prince Hotel, Tokyo, Japan (2002), 404 pp.

Workshop Proceedings Policy Design of Climate Change Collaboration in Northern Asia : Possible Options and Constraints for Cooperative Effort between Russia, Japan, China and Korea (2002), 218 pp.

Urban Environmental Management Project

Urban Environmental Challenge in Asia : Current Situations and Management Strategies, Part I : The Summary of UE 1st Phase (2001), 76 pp.

Urban Environmental Challenge in Asia : Current Situations and Management Strategies, Part II : The Challenges of Urban Environmental Management in Asia (2001), 387 pp.

Urban Environmental Challenge in Asia : Current Situations and Management Strategies, Part III : Local Case Studies by Country (2001), 431 pp.

Kitakyushu Office

Meeting Report : First Meeting of the Kitakyushu Initiative Network for Implementation of the Kitakyushu Initiative for a Clean Environment (2002), 327 pp.

Kitakyushu Initiative for a Clean Environment Business Report : (Contract with Ministry of the Environment, Government of Japan, Fiscal Year 2001) (2002), 36 pp.

Forest Conservation Project

Policy Trend Report 2001 (2001), 104 pp.

Russia Country Report 2001 (2001), 103 pp.

Research Report on Scale and Mechanism of Illegal Logging (2001), 79 pp. (in Japanese)

Environmental Education Project

Environmental Education in the Asia-Pacific Region : Status, Issue and Practices (2001), 583 pp.

Long-Term Perspective and Policy Integration Project

Towards a Sustainable Asia and the Pacific (Report of the ECO ASIA LTPP) (2001), 152 pp.

Towards a Sustainable Asia and the Pacific : Report of ECO ASIA Long-Term Perspective Project Phase II (Summary for Policy Makers) (2001), 25 pp. (in Japanese)

Towards a Sustainable Asia and the Pacific : Report of ECO ASIA Long-Term Perspective Project Phase II (Digest) (2001), 6 pp.

Report on Asia-Pacific Region Research on Innovative Strategy Option (commissioned report for MOEJ) (2002), 300 pp. (in Japanese)

Study Report on Issues on International Freshwater Resources (commissioned report for MOEJ) (2002), 120 pp. (in Japanese)

APFED Commissioned Report on Eminent Persons' Forum (commissioned report for MOEJ) (2002), 80 pp.

Business and the Environment Project

International Symposium on "Sustainable Management" : Global Trends of Sustainable Management (International Forum 2001 on "Business and the Environment") (2001), 98 pp.

International Workshop on "Environmental Accounting" : Inauguration of Environmental Management Accounting Network-Asia Pacific (EMAN-AP) (International Forum 2001 on "Business and the Environment") (2001), 154 pp.

The current situation and challenge of the environmental corporate evaluation : Contact Point of internal and external evaluation (The special session in the Society for Environmental Economics and Policy Studies) (2002), 87 pp. (in Japanese)

3. e Courses published by the Capacity Building Program

Environment

eCourse title	English	Japanese
ISO14001 for Local Governments	●	
ISO14001 Implementation for Companies	●	●
ISO14001 Staff Training	●	
EMS Auditing	●	
Implementing Sustainable Development	●	
Introduction to Climate Change	●	
Analytical Tools for Climate Change Strategy	●	
Climate Change Mitigation	●	
Mitigation Options in Forestry	●	
Participatory Forest Management in South-East Asian Countries	●	●
ICT and Environment	●	

Strategic Skills

eCourse title	English	Japanese
Management	●	
Strategic Planning for Environmental Organization	●	●
How to Write a Dissemination Plan	●	●
How to Write a Marketing Plan	●	●
Project Evaluation	●	
Presentation Skill	●	●
Conflict Resolution	●	●
Consensus Building	●	●
Risk Management	●	
Effective Meetings	●	
How to Negotiate	●	
How to Sell	●	
Implementing eLearning Projects	●	
How to structure Online Course and Lessons	●	
How to Use Course Maker	●	

URL of IGES eLearning courses: <http://www.iges.net> (English)

<http://www.iges-japan.net> (Japanese)

4. Research Achievements

1) Academic Papers

Climate Policy Project

- Naoki Matsuo and Ken Yamaguchi (2001) Climate Change Mitigation in Japan (Chapter) Eileen Claussen et al. (eds.) *Climate Change : Science, Strategies & Solutions*, Pew Center
- Wakana Takahashi and Jusen Asuka (2001) Barriers to Environmental Cooperation in Northeast Asia : Institutional Perspective, *Proceedings of the 9th World Clean Air and Environment Convention*, Seoul, Korea, August 2001., Seoul, IUAPPA
- Wakana Takahashi and Jusen Asuka (2001) The Politics of Regional Cooperation on Acid Rain Control in East Asia, *Water, Air, and Soil Pollution*, 130, Dordrecht, Kluwer Academic Publishers, pp. 1837 - 1842
- So Won Yoon (2002) A Study on the Environmental and Economic Value of Green Spaces : the Case of Seoul Metropolitan City, *Journal of the Korean Society for Environmental Restoration and Revegetation Technology*, The Korea Society for Environmental and Revegetation Technology (To be published)
- So Won Yoon and Tae Yong Jung (2002) Energy Demand Project and its Environmental Implication on the Transport Sector in Korea : An Application of LEAP Model, *Climate Policy*, Elsevier
- So Won Yoon and Dong Kun Lee (2002) A study on the Construction of the Assessment Model and it's Application for Sustainable Development in East Asia Cities, *Korean Planning Association*, 37, Korea Planners Association, pp. 7 - 25
- So Won Yoon and Dong Kun Lee (2002) The Development of the Evaluation Model of Climate Changes and Air Pollution for Sustainability of Cities in Korea, *Landscape and Urban Planning*, Elsevier (to be published)

Urban Environmental Management Project

- Xuemei Bai (2001) Current Status, Process and Mechanism of Urban Environmental Change in Asia, Urban Environmental Management Project (ed.) *Urban Environmental Challenge in Asia : Current Situations and Management Strategies*, Part I : The Summary of UE 1st Phase Project, Hayama, IGES, pp. 5 - 10
- Xuemei Bai (2001) Environmental Features, Transformation Process and Strategies of East Asian Cities, Urban Environmental Management Project (ed.) *Urban Environmental Challenge in Asia : Current Situations and Management Strategies*, Part III : Local Case Studies by Country, Hayama, IGES, pp. 1 - 18
- Xuemei Bai (2001) Towards Sustainable Water Resource Management in Tianjin : A Case Study in Tianjin, China, Urban Environmental Management Project (ed.) *Urban Environmental Challenge in Asia : Current Situations and Management Strategies*, Part III : Local Case Studies by Country, Hayama, IGES, pp. 376-389
- Xuemei Bai and Hidefumi Imura (2001) A Comparative Study of Urban Environment in East Asia : Stage Model of Urban Environmental Evolution, Urban Environmental Management Project (ed.) *Urban Environmental Challenge in Asia : Current Situations and Management Strategies*, Part II : The Challenges of Urban Environmental Management in Asia, Hayama, IGES, pp. 1 - 26
- Miao Chang (2001) Financing for Urban Environmental Infrastructure in East Asia : Current Situation, Challenges and Strategies, Urban Environmental Management Project (ed.) *Urban Environmental Challenge in Asia : Current Situations and Management Strategies*, Part I : The Summary of UE 1st Phase Project, Hayama, IGES, pp. 27 - 37
- Miao Chang, Yong Ren, and Hidefumi Imura (2001) Financing of Urban Environmental Infrastructure in East Asia : Current Situation, Challenges and Strategies, Urban Environmental Management Project (ed.) *Urban Environmental Challenge in Asia: Current Situations and Management Strategies*, Part II: The Challenges of Urban Environmental Management in Asia, Hayama, IGES, pp. 187-216
- Shinji Kaneko (2001) A Comparative Study on Urban Transportation and Air Pollution in Four Asian Mega-cities : The Cases of Tokyo, Seoul, Beijing and Shanghai, Urban Environmental Management Project (ed.) *Urban Environmental Challenge in Asia : Current Situations and Management Strategies*, Part I : The Summary of UE 1st Phase Project, Hayama, IGES, pp. 37 - 52
- Shinji Kaneko (2001) A Comparative Study on Urban Transportation and Air Pollution in Four Asian Mega-cities : The Cases of Tokyo, Seoul, Beijing and Shanghai, Urban Environmental Management Project (ed.) *Urban Environmental Challenge in Asia : Current Situations and Management Strategies*, Part II : The Challenges of Urban Environmental Management in Asia, Hayama, IGES, pp. 359 - 287
- Changki Kwon (2001) Comparative Studies of Urban Environmental Management in Asia, Urban Environmental Management Project (ed.) *Urban Environmental Challenge in Asia : Current Situations and Management Strategies*, Part I : The summary of UE 1st Phase Project, Hayama, IGES, pp. 10 - 22
- Yong Ren and Miao Chang (2001) A Comparative Study on Urban Environmental Governance in East Asia, Urban Environmental Management Project (ed.) *Urban Environmental Challenge in Asia : Current Situations and Management Strategies*, Part I : The Summary of UE 1st Phase Project, Hayama, IGES, pp. 59 - 65
- Yong Ren, Miao Chang, and Hidefumi Imura (2001) Urban Environmental Governance in East Asia, Urban Environmental Management Project (ed.) *Urban Environmental Challenge in Asia : Current Situations and Management Strategies*, Part II : The Challenges of Urban Environmental Management in Asia, Hayama, IGES, pp. 27-68

Kitakyushu Office

- M. Chang and H. Imura (2001) Financing Urban Environmental Infrastructure in China: Current Situation and Challenges, JASID (ed.) *Proceedings of the 12th Annual Conference*, The Japan Society for International Development, Hiroshima, The Japan Society for International Development (JASID), pp. 434-439
- M. Chang and H. Imura (2001) Financing Urban Environmental Infrastructure in China : Current Situation and Challenges, Hiroshi Osada (ed.) *Journal of International Development Studies*, Vol. 11, No. 1, Nagoya, JASID (submitted for publication)

- M. Chang, Y. Ren and H. Imura (2001) Financing Urban Environmental Infrastructure in East Asia : Current Situation, Challenges, and Strategies, IGES (ed.) *International Review for Environmental Strategies*, Vol. 2, No. 1, Hayama, IGES, pp. 79-106
- M. Chang, Y. Ren and H. Imura (2001) Strategies for Promoting Urban Environmental Infrastructure in East Asia, Wang Jinghao (ed.) *World Environment*, Beijing, State Environmental Protection Administration (SEPA) & United Nations Environment Programme (UNEP), pp. 29-32 (in Chinese)
- K. M. Zhang, M. Chang and B. Du (2002) Environmental Protection Policies and Environmental Governance in Chinese Cities, Yoshio-ka Kanji, Kojima Tomoyuki (eds.) *Economic Development and Environmental Conservation in Asia*, Volume 4, Tokyo, Institute for Economic and Industry Studies (Keio Economic Observatory), pp. 71-95
- S. Dhakal (2001) Climate Change Initiatives and Nepal, *Technical Journal*, Vol 2001, No. 1, Kathmandu, Nepal Engineer's Association, pp. 24-31
- S. Dhakal (2001) Financing the Adaptation to the Climate Change : Issues and Controversies, *Environment: A Journal of Environment*, Vol. 6, No. 7, Kathmandu, Ministry of Environment and Population, His Majesty's Government, Nepal, pp. 23-33
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5. Workshops and Seminars organized by IGES

Climate Policy Project

Date	Title	Co-organizers	Place
Apr. 11, 2001	IGES Brainstorming Forum : Perspective for Kyoto Regime		Nippon Press Center Building, Tokyo
Apr. 12-13, 2001	Symposium on Kyoto Mechanism : For Workable and Dependable Emission Trading	Ministry of Foreign Affairs, Ministry of Economy, Trade and Industry, New Energy and Industrial Technology Development Organization, Global Industrial and Social Progress Research Institute	United Nations University International Conference Room, Tokyo
May 29, 2001	IGES Open Forum to Address Global Warming 2002		JA Bldg., Tokyo
May 31-Jun. 1, 2001	Climate Policy Dialogue in Korea	Korea Environment Institute, UNEP Collaborating Centre on Energy & Environment	Seoul, Korea
Aug. 23, 2001	Post-COP6 Seminar Part II	Global Industrial and Social Progress Research Institute	Tokai Daigaku Koyu Kaikan, Tokyo
Sept. 6-7, 2001	Expert Meeting on Climate Change and Sustainable Development	Korea Environment Institute	Seoul, Korea
Sept. 10-14, 2001	Work Plan Meeting for APN Project on Policy Design of Climate Change Collaboration in Northern Asia: Possible Options and Constraints for Cooperative Effort between Russia, Japan, China and Korea	Russia Academy of Science	Moscow, Russia
Oct. 16, 2001	The 1st Open Forum on Global Warming Part II		Tokai Daigaku Koyu Kaikan, Tokyo
Nov. 5, 2001	Climate Policy Dialogue in Asia		Marrakesh, Morocco
Nov. 22, 2001	The 2nd Open Forum on Global Warming Part II		Fukoku Seimei Building, Tokyo
Nov. 26-27, 2001	Climate Policy Dialogue in India: North-South Dialogue on Climate Policy -The Way Forward	TATA Energy Research Institute, UNEP Collaborating Centre on Energy & Environment	New Delhi, India
Dec. 3, 2001	Post-COP7 Seminar	Global Industrial and Social Progress Research Institute	Nadao Hall, Tokyo
Dec. 17-18, 2001	International Workshop on Climate Policy in Asia		Shinagawa Prince Hotel, Tokyo
Jan. 17-18, 2002	IGES/NIES Workshop on GHG Inventories for Asia-Pacific Region	National Institute for Environmental Studies	Shonan Village Center, Hayama
Feb. 27-28, 2002	Final Meeting for APN Project on Policy Design of Climate Change Collaboration in Northern Asia : Possible Options and Constraints for Cooperative Effort between Russia, Japan, China and Korea		Cheju, Korea

Urban Environmental Management Project

Date	Title	Co-organizers	Place
Jun. 12-15, 2001	The 1st APN Working Group Meeting : Study on Urban Policy Integration for Energy Related Issues in Selected Asian Mega-Cities		Beijing, China
Sep. 4-6, 2001	The 2nd APN Working group Meeting : Study on Urban Policy Integration for Energy Related Issues in Selected Asian Mega-Cities		Seoul, Korea
Jan. 23-24, 2002	Workshop of IGES/APN Mega-City Project: Policy Integration for Energy Related issues in Asian mega-Cities		Rihga Royal Hotel, Kitakyushu
Jan. 25, 2002	Symposium on Sustainable Urban Development in Asia : Policy Integration & Industrial Transformation towards Sustainable Urban Energy Use for Cities in Asia		Rihga Royal Hotel, Kitakyushu

Kitakyushu Office

Date	Title	Co-organizers	Place
Aug. 8, 2001	Thai Workshop on the Implementation of the Kitakyushu Initiative for a Clean Environment	United Nations Economic and Social Commission for Asia and the Pacific (UN/ESCAP)	Bangkok, Thailand
Nov. 20-21, 2001	First Meeting of the Kitakyushu Initiative Network : For Implementation of the Kitakyushu Initiative for a Clean Environment	UN/ESCAP	Kitakyushu International Conference Center (KICC) and Rihga Royal Hotel Kokura, Kitakyushu

Forest Conservation Project

Date	Title	Co-organizers	Place
Jun. 2, 2001	1st Internal Workshop on Forest Conservation Project		Faculty of Agriculture, The University of Tokyo, Tokyo
Jul. 26, 2001	Steering Committee Meeting in Indonesian Studies	Indonesian Institute of Sciences	Jakarta, Indonesia
Jul. 31, 2001	Local Workshop in East Kalimantan : Integrating Research and Development -Strategic Planning in Developing People's Participation in Forest Management	Center for Social Forestry, Mulawarman University	East Kalimantan, Indonesia
Aug. 8, 2001	Steering Committee Meeting in Russian Studies	Economic Research Institute of the Far Eastern Branch of the Russian Academy of Sciences	Khabarovsk, Russia
Sep. 3, 2001	Coordination Committee Meeting in Laotian Studies	Faculty of Forestry, National University of Laos	Vientiane, Laos
Sep. 5, 2001	Local Meeting in Savannakhet	Provincial Agricultural and Forestry Office in Savannakhet	Savannakhet, Laos
Sep. 25, 2001	Local Meeting in Khabarovsk Krai	Economic Research Institute of the Far Eastern Branch of the Russian Academy of Sciences	Khabarovsk Krai, Russia
Sep. 27, 2001	Local Meeting in Khabarovsk	Economic Research Institute of the Far Eastern Branch of the Russian Academy of Sciences	Khabarovsk, Russia
Oct. 22, 2001	Local Meeting in Oudomxay	Provincial Agricultural and Forestry Office in Oudomxay	Oudomxay, Laos

Environmental Education Project

Date	Title	Co-organizers	Place
May 16, 2001	Wise Use of Wetlands and Education	Ramsar Center Japan	Forum 8, Shibuya
Jul. 10-Aug. 10, 2001	Environmental Education Training for NGO Staff in Indonesia		IGES, Hayama / JICA Tokyo International Centre, Tokyo
Aug. 27-30, 2001	Asian Wetlands Symposium	Ramsar Center Japan/University Sains Malaysia	Penang, Malaysia
Oct. 5, 2001	Global Forum on Education for a Sustainable Development	Organization for Industrial, Spiritual and Cultural Advancement - International	National Olympic Memorial Center, Tokyo
Nov. 11-16, 2001	9th International Conference on the conservation and Management of Lakes:Partnership for Sustainable Lake in Lake Environment	International Lake Environment Committee/Shiga Prefecture	Biwako Hall, Otsu

Long-Term Perspective and Policy Integration Project

Date	Title	Co-organizers	Place
Sept. 6-7, 2001	A Joint Workshop on Asia-Pacific Environmental Innovation Strategy Project (APEIS) and Millennium Ecosystem Assessment (MA)	Ministry of Environment of Japan, Asia-Pacific Network for Global Change Research (APN), United Nations University Institute of Advanced Studies (UNU/IAS)	United Nations University, Tokyo
Oct. 21-23, 2001	Eco-consciousness Workshop:Comparison of Environmental Attitude in Asia	Kyoto Environmental Sociology Conference (IGES was a co-organizer of one session)	Bukkyo University, Kyoto
Jan. 10, 2002	The First Multistakeholder Meeting on Asia Pacific Forum for Environment and Development	Ministry of Environment of Japan, Economic and Social Commission for Asia and the Pacific (ESCAP), United Nations Environment Programme (UNEP), Thailand Environment Institute (TEI)	Bangkok, Thailand
Jan. 11, 2002	The First Expert Meeting on Asia Pacific Forum for Environment and Development	Ministry of Environment of Japan, Economic and Social Commission for Asia and the Pacific(ESCAP), United Nations Environment Programme(UNEP), Thailand Environment Institute(TEI)	Bangkok, Thailand
Mar. 29, 2002	APFED Expert Meeting (Freshwater Resources)		United Nations University, Tokyo

Business and the Environment Project

Date	Title	Co-organizers	Place
Sep. 26, 2001	International Symposium on "Sustainable Management" : Global Trends of Sustainable Management		Shin Kobe Oriental Hotel, Kobe
Sep. 27, 2001	International Workshop on "Environmental Accounting" : Inauguration of Environmental Management Accounting Network - Asia Pacific (EMAN-AP)		Shin Kobe Oriental Hotel, Kobe

Sep. 30, 2001	The Current Situation and Challenge of the Environmental Corporate Evaluation Contact Point of Internal and External Evaluation	the Society for Environmental Economics and Policy Studies	Kyoto International Conference Hall, Kyoto
Jan. 24, 2002	Seminar on Countermeasures against global warming: COP7 and Future of Business Activities	Global Environment Forum-KANSAI	Hankyu Grand Building, Osaka
Mar. 8, 2002	Environmental Reporting Seminar : Possible Influence of GRI Guidelines that is in the Revision Process		IHD Building, Kobe

Capacity Building Program

Date	Title	Co-organizers	Place
Apr. 16-20, 2001	LEAD 4th National Training Session for Cohort 8	LEAD Japan	Shonan Village Centre, Hayama / Keio University, Fujisawa

6. Field Studies

Climate Policy Project

Date	Purpose	Place	Name
Sept. 17-19, 2001	Data Collection/Collaboration with Korean Institutes and Universities	Seoul, Korea	So Won Yoon, Tae Yong Jung

Urban Environmental Management Project

Date	Purpose	Place	Name
Jun. 6-11, 2001	Data collection and discussion with Chinese experts at Tsinghua University	Beijing, China	Shinji Kaneko, Kosuke Araki
Jun. 12-15, 2001	Field survey on transportation policy in Shanghai/discussion with Chinese experts at Shanghai Academy of Environmental Science, and Shanghai Urban Transport Bureau.	Shanghai, China	Hidefumi Imura, Tae Yong Jung, Shinji Kaneko, Kosuke Araki
Mar. 12-15, 2002	Data collection and discussion with Chinese experts at China Council for International Cooperation on Environment and Development	Beijing, China	Hidefumi Imura, Shinji Kaneko, Kosuke Araki
Mar. 22-23, 2002	Visit to Kimpo Waste Landfill site, data collection at Sangmyung University	Seoul, Korea	Shinji Kaneko, Kosuke Araki, Hirofumi Nakayama (Visiting Researcher)

Kitakyushu Office

Date	Purpose	Place	Name
May 21-26, 2001	Effectiveness of research framework for urban environmental policy performance and indicators created by IGES for implementation of the Kitakyushu Initiative in China	Chongqing and Ningbo, China	Hidefumi Imura, Shinji Kaneko, Keiko Sasaki, Miao Chang, Shobhakar Dhakal, Osamu Norimatsu
Jun. 14-18, 2001	Implementation of pilot activities for the Kitakyushu Initiative in Thailand	Bangkok and Nonthaburi, Thailand	Shobhakar Dhakal, Keiko Sasaki
Sep. 20-25, 2001	Participation in the Pan-Yellow Sea Cities Conference / Discussions for implementation of pilot activity in Ningbo	Beijing and Yantai, China	Keiko Sasaki, Miao Chang

Oct. 1-10, 2001	Support for plans and programs of Kitakyushu Initiative / Identification of potential pilot activities for the Kitakyushu Initiative in Thailand, Nepal, and Bangladesh	Nakhon Ratchasima Korat and Nonthaburi, Thailand / Kathmandu, Nepal / Dhaka, Bangladesh	Shobhakar Dhakal
Oct. 22-26, 2001	Collection of successful practices in urban environmental management	Guangzhou and Shenzhen, China	Keiko Sasaki, Miao Chang
Jan. 27-Feb. 1, 2002	Implementation of pilot activities for the Kitakyushu Initiative in Thailand	Nakhon Ratchasima/Korat and Nonthaburi, Thailand	Osamu Norimatsu, Keiko Sasaki
Mar. 25-30, 2002	Feasibility of implementation of pilot activities for the Kitakyushu Initiative in China / On-site field survey	Ningbo, China	Keiko Sasaki, Miao Chang, Osamu Norimatsu

Forest Conservation Project

Date	Purpose	Place	Name
May 16-27, 2001	Negotiation for further research collaboration with Department of Forestry and Faculty of Forestry, National University of Laos	Savannakhet and Vientiane, Laos	Kimihiko Hyakumura
Jun. 11-22, 2001	Attending to the first substantive meeting of United Nations Forums on Forests	New York, U.S.A	Kiyoshi Komatsu
Aug. 1-30, 2001	Participatory Action Research (Trip I)	West Kutai District and East Kutai District, East Kalimantan Province, Indonesia	Martinus Nanang
Aug. 25-31, 2001	Attending the Asia Wetlands Symposium	Penang, Malaysia	Kiyoshi Komatsu
Aug. 25-Sep. 1, 2001	Field survey of Chinese forest resources, forest related industry and timber trade	Beijing and Harbin, China	Satoshi Tachibana
Aug. 26-Sep. 19, 2001	Management of Coordination Committee Meeting at National University of Laos, management of Local Meeting at Savannakhet Province and preparation of Local Meeting at Oudomxay Province	Vientiane, Savannakhet and Oudomxay, Laos	Kimihiko Hyakumura
Sep. 1-6, 2001	National forest policy in Laos	Vientiane, Laos	Makoto Inoue
Sep. 1-7, 2001	Contributing Coordination Committee Meeting at National University of Laos and Local Meeting at Savannakhet Province	Vientiane, Laos	Kiyoshi Komatsu
Sep. 16-28, 2001	Supporting International Symposium, participation in the Local Meeting at the research sites in the 2nd phase, field survey of forest policy in Russian Far East and so on	Yuzhno-Sakhalinsk and Khabarovsk Krai, Russia	Satoshi Tachibana and Kiyoshi Komatsu
Sep. 30-Oct. 30, 2001	Participatory Action Research (Trip II)	West Kutai District and East Kutai District, East Kalimantan Province, Indonesia	Martinus Nanang
Oct. 20-27, 2001	Actual condition of forest management in Oudomxay province	Oudomxay, Laos	Makoto Inoue
Oct. 20-Dec. 20, 2001	Management of Local Meeting at Oudomxay Province and research on National Bio-diversity Conservation Area	Savannakhet and Vientiane, Laos	Kimihiko Hyakumura
Nov. 19-Dec. 1, 2001	Field survey of Indonesian forest policy, forest certification, forest related industry and timber trade	Jakarta and Semarang, Indonesia	Satoshi Tachibana
Nov. 26-Dec. 12, 2001	Attending International Symposium on Wetlands in Tropical Urban Environment at Luang Prabang Lao PDR and research on current situation of forestry policy and environmental policy in Laos by visiting relevant ministries and international organization	Luang Prabang and Vientiane, Laos	Kiyoshi Komatsu

Feb. 1-24, 2002	Participatory Action Research (Trip III)	West Kutai District and East Kutai District, East Kalimantan Province, Indonesia	Martinus Nanang
Mar. 3-30, 2002	Research on National Bio-diversity Conservation Area	Savannakhet and Vientiane, Laos	Kimihiko Hyakumura

Environmental Education Project

Date	Purpose	Place	Name
May 14-23, 2001	Field Research on Ecotourism in Costa Rica	Monteverde, Costa Rica	Osamu Abe, Akihiro Nakahata
Jun. 6-10, 2001	Eco-tourism education in Cambodia	Siem Reap, Cambodia	Osamu Abe, Bishnu Bhandari
Jun. 11-12, 2001	Eco-tourism education in Singapore	Singapore, Singapore	Bishnu Bhandari
Dec. 5-18, 2001	Field research on Ecotourism in Malaysia	Kinabatangan, Malaysia	Akihiro Nakahata
Dec. 15-20, 2001	Field research on Ecotourism in Cambodia	Siem Reap, Cambodia	Osamu Abe
Mar. 29-Apr. 1, 2002	Field research on Ecotourism in Indonesia	Jakarta, Indonesia	Osamu Abe

Financial Statement

貸借対照表

2000年度及び2001年度

Balance Sheet

Fiscal 2000 (Year ended March 31, 2001) and
Fiscal 2001 (Year ended March 31, 2002)

I 資産の部	Assets
1 流動資産	Current assets
現金・預金	Cash on hand and in banks
未収金	Accounts receivable
未収会費	Membership fee receivable
短期貸付金	Short-term loans
前払費用	Prepaid expenses
立替金	Advance disbursement
仮払金	Advance payments
会計間貸借	Inter-account receivables (payables)
流動資産合計	Total current assets
2 固定資産	Non-current assets
基本財産	Assets for basic funds
投資有価証券(基本金)	Investment securities (Basic Fund)
投資有価証券(戦略研究基金)	Investment securities (Strategic Research Fund)
その他の固定資産	Other non-current assets
建物付属設備	Building equipment
情報通信設備	IT equipment
車両運搬具	Vehicles
什器備品	Office equipment
ソフトウェア	Software
計	
投資有価証券	Investment securities
電話加入権	Telephone rights
敷金	Lease deposits
退職給与引当預金	Deposits for severance indemnities funds
減価償却引当預金	Deposits for depreciation funds
固定資産合計	Total non-current assets
資産合計	Total assets
II 負債の部	Liabilities
1 流動負債	Current liabilities
未払金	Accounts payable
前受金	Advance receipt
預り金	Deposits received
流動負債合計	Total current liabilities
2 固定負債	Non-current liabilities
退職給与引当金	Accrued severance indemnities
固定負債合計	Total non-current liabilities
負債合計	Total liabilities
III 正味財産の部	Net Assets
1 永久的に用途を制限された正味財産	Permanently restricted
基本金	Basic Fund
戦略研究基金	Strategic Research Fund
2 一時的に用途を制限された正味財産	Temporarily restricted
IPCC/TSU特別会計活動資金	Net assets for IPCC/TSU Fund
インターネット特別会計活動資金	Net assets for the Internet Global Environmental Fund
3 用途を制限されない正味財産	Unrestricted
正味財産合計	Total net assets
負債及び正味財産合計	Total liabilities and net assets

(単位：千円, Unit : Thousands of Yen)

3月 31日 March 31

2000年				2001年			
一般会計	特別会計	Special Account	計	一般会計	特別会計	Special Account	計
General Account	IPCC/TSU	インターネット 地球環境基金 Internet Global Environmental Fund	Total	General Account	IPCC/TSU	インターネット 地球環境基金 Internet Global Environmental Fund	Total
56,250	53,871	1,884,224	1,994,345	3,502	50,573	1,621,752	1,675,827
64,035	-	-	64,035	293,666	8	-	293,674
100	-	-	100	70	-	-	70
474	-	-	474	-	-	-	-
2,138	-	-	2,138	7,415	-	-	7,415
543	-	-	543	392	-	-	392
155	-	-	155	736	-	-	736
-	-	-	-	(50,000)	50,000	-	-
123,695	53,871	1,884,224	2,061,790	255,781	100,581	1,621,752	1,978,114
50,000	-	-	50,000	50,000	-	-	50,000
200,000	-	-	200,000	200,000	-	-	200,000
250,000	-	-	250,000	250,000	-	-	250,000
14,500	2,763	-	17,263	13,457	2,576	-	16,033
21,452	21,630	-	43,082	16,106	16,925	-	33,031
1,754	-	-	1,754	1,391	-	-	1,391
937	819	-	1,756	3,982	1,706	-	5,688
9,414	473	-	9,887	7,321	338	-	7,659
48,057	25,685	-	73,742	42,257	21,545	-	63,802
390	-	-	390	-	-	-	-
1,788	306	-	2,094	1,788	305	-	2,093
3,804	840	-	4,644	3,862	840	-	4,702
598	80	-	678	12,441	1,428	854	14,723
25,573	8,718	-	34,291	35,619	13,939	-	49,558
80,210	35,629	-	115,839	95,967	38,057	854	134,878
330,210	35,629	-	365,839	345,967	38,057	854	384,878
453,905	89,500	1,884,224	2,427,629	601,748	138,638	1,622,606	2,362,992
117,789	7,242	1,136	126,167	145,187	6,260	59,366	210,813
70	-	-	70	-	-	-	-
5,681	729	54	6,464	7,700	820	579	9,099
123,540	7,971	1,190	132,701	152,887	7,080	59,945	219,912
1,689	223	-	1,912	12,441	1,428	854	14,723
1,689	223	-	1,912	12,441	1,428	854	14,723
125,229	8,194	1,190	134,613	165,328	8,508	60,799	234,635
50,000	-	-	50,000	50,000	-	-	50,000
200,000	-	-	200,000	200,000	-	-	200,000
250,000	-	-	250,000	250,000	-	-	250,000
-	81,306	-	81,306	-	130,130	-	130,130
-	-	1,883,034	1,883,034	-	-	1,561,807	1,561,807
-	81,306	1,883,034	1,964,340	-	130,130	1,561,807	1,691,937
78,676	-	-	78,676	186,420	-	-	186,420
328,676	81,306	1,883,034	2,293,016	436,420	130,130	1,561,807	2,128,357
453,905	89,500	1,884,224	2,427,629	601,748	138,638	1,622,606	2,362,992

正味財産増減計算書

2000年度及び2001年度

Statement of Activities

Fiscal 2000 (Year ended March 31, 2001) and
Fiscal 2001 (Year ended March 31, 2002)

		2000年度 Fiscal 2000		
		一般会計	特別会計 Special Account	計 Total
		General Account	IPCC/TSU インターネット地球環境基金 Internet Global Environmental Fund	
		決算額	決算額	決算額
		Actual	Actual	Actual
I 収入（収益）の部	Revenues and gains:			
1 基本財産運用収入	Income from basic fund			
基本財産利息収入	Interest income	1,931	-	1,931
2 戦略研究基金運用収入	Income from strategic research fund			
戦略基金運用利息	Interest income	7,426	-	7,426
3 会費収入	Membership fees	4,110	-	4,110
4 事業収入	Contract revenues			
受託事業収入	Contract revenues	165,652	-	165,652
その他の事業収入	Others	1,669	-	1,669
		167,321	-	167,321
5 拠出金収入(環境省)	Contribution from Ministry of the Environment			
	For Strategic Research	500,000	-	500,000
	For Internet Global Environmental Fund	-	2,000,000	2,000,000
		500,000	2,000,000	2,500,000
6 補助金収入	Grants			
神奈川県	from Kanagawa Prefecture			
運営費・事業費	For office management and promotion	86,300	-	86,300
家賃	For office rent	133,368	-	133,368
北九州市	from Kitakyushu City	43,161	-	43,161
兵庫県	from Hyogo Prefecture	-	-	-
		262,829	-	262,829
7 研究助成金収入	Research grant	10,828	-	10,828
8 負担金収入	Revenue for shared services	5,040	-	5,040
9 雑収入	Miscellaneous income	10,937	-	10,937
10 日本特別基金収入	Subsidies for IPCC Japanese special fund	-	175,983	175,983
収入（収益）計	Total revenues and gains:	970,422	175,983	3,146,405
II 支出（費用）の部	Expenses and losses:			
1 事業費	Expenses for promotion of projects	706,201	146,750	969,917
2 管理費	General and administrative expenses	259,286	-	259,286
3 減価償却費	Depreciation and amortization	9,918	5,202	15,120
4 退職給与引当金繰入 (支払額控除後)/戻入	Provision (reversal) for severance indemnities (net of payments)	(4,886)	(199)	(5,085)
5 予備費	Budgeted reservation	-	-	-
支出（費用）計	Total expenses and losses:	970,519	151,753	1,239,238
当期正味財産増加（減少）額	Increase (decrease) in net assets:	(97)	24,230	1,907,167
前期繰越正味財産	Net assets at beginning of year	328,773	57,076	385,849
次期繰越正味財産	Net assets at end of year	328,676	81,306	2,293,016

* 特別会計の正味財産は、特定の目的のために一時的に使途を制限された基金である。

* Net assets for Special Accounts mean temporarily restricted fund for specific purposes.

収支計算書
2000年度及び2001年度

Statement of Cash Flows
Fiscal 2000 (Year ended March 31,2001) and
Fiscal 2001 (Year ended March 31,2002)

		2000年度 Fiscal 2000			
		一般会計	特別会計 Special Account		
		General Account	IPCC/TSU	Internet Global Environmental Fund	計 Total
		Account			
		決算額	決算額	決算額	決算額
		Actual	Actual	Actual	Actual
I 経常収支	Cash flows from operating activities:				
1 当期正味財産増加額	Changes in net assets	(97)	24,230	1,883,034	1,907,167
2 経常収支への調整	Adjustments to reconcile change in net assets to net cash used by operating activities:				
減価償却費	Depreciation and amortization	9,918	5,202	-	15,120
退職給与引当金繰入（戻入） 額	Provision (reversal) for severance indemnities:	(4,886)	(199)	-	(5,085)
戦略基金運用利息等	Interest income	-	-	-	-
未収金（増加） 減少	Decrease (increase) in accounts receivable	83,899	126	-	84,025
その他流動資産（増加） 減少	Decrease (increase) in other current assets:	(760)	15	-	(745)
未払金増加（減少）	Increase (decrease) in accounts payable	2,525	(10,121)	1,136	(6,460)
その他流動負債増加	Increase in other current liabilities	2,602	354	54	3,010
経常収支	Net cash provided by (used in) operating activities:	93,201	19,607	1,884,224	1,997,032
II 投資活動	Cash flows from investing activities:				
1 固定資産取得支出	Purchase of property and equipment				
情報通信設備	Purchase of IT equipment	(326)	-	-	(326)
車両運搬具	Purchase of vehicles	-	-	-	-
什器備品	Purchase of office equipment	-	-	-	-
ソフトウェア	Purchase of software	(246)	-	-	(246)
		(572)	-	-	(572)
2 特定預金及び有価証券の設定	Increase in deposits and securities for specific funds				
基本財産特定投資有価証券	Investment securities for Basic Fund	(50,000)	-	-	(50,000)
戦略研究基金特定投資有価証券	Investment securities for Strategic Research Fund	(300,388)	-	-	(300,388)
余裕資金特定有価証券	Marketable securities	(85,704)	-	-	(85,704)
退職給与引当金特定預金	Deposits for severance indemnities funds	(4,383)	(502)	-	(4,885)
減価償却引当金特定預金	Deposits for depreciation funds	(18,950)	(8,719)	-	(27,669)
固定資産購入特定預金	Deposits for purchase of property and equipment	-	-	-	-
		(459,425)	(9,221)	-	(468,646)
3 特定預金取崩	Decrease in deposits for specific funds				
基本財産特定投資有価証券	Investment securities for Basic Fund	49,900	-	-	49,900
戦略研究基金特定預金	Deposits for Strategic Research Fund	50,000	-	-	50,000
戦略研究基金特定投資有価証券	Investment securities for Strategic Research Fund	250,157	-	-	250,157
余裕資金特定有価証券	Marketable securities	85,644	-	-	85,644
退職給与引当金特定預金	Deposits for severance indemnities funds	6,575	422	-	6,997
		442,276	422	-	442,698
4 その他	Other				
敷金支出	Payment of guaranty deposits	-	-	-	-
合 計	Net cash used in investing activities	(17,721)	(8,799)	-	(26,520)
III 財務活動	Cash flows from financing activities:				
1 短期借入金収入	Borrowing of short term loans	80,000	-	-	80,000
2 短期借入金返済支出	Repayments of short term loans	(80,000)	-	-	(80,000)
3 会計間貸借	Inter-account receivables (payables)	(20,000)	20,000	-	-
合 計	Net cash provided by (used in) financing activities:	(20,000)	20,000	-	-
現金及び現金同等物増加（減少） 額	Net increase (decrease) in cash and cash equivalent:	55,480	30,808	1,884,224	1,970,512
現金及び現金同等物期首残高	Cash and cash equivalents at beginning of year	770	23,063	-	23,833
現金及び現金同等物期末残高	Cash and cash equivalents at end of year	56,250	53,871	1,884,224	1,994,345
IV 収支差額との調整	Reconciliation to Surplus from revenues over expenditures				
現金及び現金同等物増加（減少） 額	Net increase (decrease) in cash and cash equivalent:	55,480	30,808	1,884,224	1,970,512
未収金（増加） 減少	Decrease (increase) in accounts receivable	(83,899)	(126)	-	(84,025)
その他流動資産（増加） 減少	Decrease (increase) in other current assets:	760	(15)	-	745
未払金増加（減少）	Increase (decrease) in accounts payable	(2,525)	10,121	(1,136)	6,460
その他流動負債増加	Increase in other current liabilities:	(2,602)	(354)	(54)	(3,010)
	Surplus from revenues over expenditures				
当期収支差額	For the year	(32,786)	40,434	1,883,034	1,890,682
前期繰越収支差額	Beginning of year	32,941	5,466	-	38,407
次期繰越収支差額	End of year	155	45,900	1,883,034	1,929,089

2001年度 Fiscal 2001

(単位：千円, Unit : Thousands of Yen)

一般会計 General Account			特別会計 Special Account								
			IPCC/TSU			(28-特)地球環境基金 Internet Global Environmental Fund			計 Total		
予算額 Budget	決算額 Actual	差異 Difference	予算額 Budget	決算額 Actual	差異 Difference	予算額 Budget	決算額 Actual	差異 Difference	予算額 Budget	決算額 Actual	差異 Difference
40,146	107,744	(67,598)	50,299	48,824	1,475	(380,214)	(321,227)	(58,987)	(289,769)	(164,659)	(125,110)
9,896	10,045	(149)	5,202	5,221	(19)	-	-	-	15,098	15,266	(168)
12,504	10,753	1,751	1,407	1,204	203	-	853	(853)	13,911	12,810	1,101
-	1,167	(1,167)	-	-	-	-	-	-	-	1,167	(1,167)
-	(229,631)	229,631	-	(8)	8	-	-	-	-	(229,639)	229,639
118	(5,203)	5,321	-	-	-	-	-	-	118	(5,203)	5,321
118,831	27,398	91,433	(2,329)	(982)	(1,347)	55,947	58,230	(2,283)	172,449	84,646	87,803
500	1,949	(1,449)	-	91	(91)	200	525	(325)	700	2,565	(1,865)
181,995	(75,778)	257,773	54,579	54,350	229	(324,067)	(261,619)	(62,448)	(87,493)	(283,047)	195,554
-	-	-	(500)	-	(500)	-	-	-	(500)	-	(500)
(4,600)	(3,354)	(1,246)	(500)	(1,080)	580	-	-	-	(5,100)	(4,434)	(666)
(700)	(893)	193	(500)	(500)	(500)	-	-	-	(1,200)	(893)	(307)
(5,300)	(4,247)	(1,053)	(1,500)	(1,080)	(420)	-	-	-	(6,800)	(5,327)	(1,473)
-	(50,000)	50,000	-	-	-	-	-	-	-	(50,000)	50,000
-	(200,000)	200,000	-	-	-	-	-	-	-	(200,000)	200,000
-	(100,777)	100,777	-	-	-	-	-	-	-	(100,777)	100,777
(12,504)	(12,441)	(63)	(1,407)	(1,347)	(60)	(853)	(853)	-	(14,764)	(14,641)	(123)
(9,896)	(10,045)	149	(5,202)	(5,221)	19	-	-	-	(15,098)	(15,266)	168
(35,000)	-	(35,000)	(8,750)	-	(8,750)	-	-	-	(43,750)	-	(43,750)
(57,400)	(373,263)	315,863	(15,359)	(6,568)	(8,791)	(853)	(853)	-	(73,612)	(380,684)	307,072
-	50,000	(50,000)	-	-	-	-	-	-	-	50,000	(50,000)
-	200,000	(200,000)	-	-	-	-	-	-	-	200,000	(200,000)
-	100,000	(100,000)	-	-	-	-	-	-	-	100,000	(100,000)
-	598	(598)	-	-	-	-	-	-	-	598	(598)
-	350,598	(350,598)	-	-	-	-	-	-	-	350,598	(350,598)
-	(58)	58	-	-	-	-	-	-	-	(58)	58
(62,700)	(26,970)	(35,730)	(16,859)	(7,648)	(9,211)	(853)	(853)	-	(80,412)	(35,471)	(44,941)
-	50,000	(50,000)	-	-	-	-	-	-	-	50,000	(50,000)
-	(50,000)	50,000	-	-	-	-	-	-	-	(50,000)	50,000
-	50,000	(50,000)	-	(50,000)	50,000	-	-	-	-	-	-
-	50,000	(50,000)	-	(50,000)	50,000	-	-	-	-	-	-
119,295	(52,748)	172,043	37,720	(3,298)	41,018	(324,920)	(262,472)	(62,448)	(167,905)	(318,518)	150,613
41,583	56,250	(14,667)	97,833	53,871	43,962	97,833	1,884,224	(1,786,391)	237,249	1,994,345	(1,757,096)
160,878	3,502	157,376	135,553	50,573	84,980	(227,087)	1,621,752	(1,848,839)	69,344	1,675,827	(1,606,483)
119,295	(52,748)	172,043	37,720	(3,298)	41,018	(324,920)	(262,472)	(62,448)	(167,905)	(318,518)	150,613
-	229,631	(229,631)	-	8	(8)	-	-	-	-	229,639	(229,639)
(118)	5,203	(5,321)	-	-	-	-	-	-	(118)	5,203	(5,321)
(118,831)	(27,398)	(91,433)	2,329	982	1,347	(55,947)	(58,230)	2,283	(172,449)	(84,646)	(87,803)
(500)	(1,949)	1,449	-	(91)	91	(200)	(525)	325	(700)	(2,565)	1,865
(154)	152,739	(152,893)	40,049	(2,399)	42,448	(381,067)	(321,227)	(59,840)	(341,172)	(170,887)	(170,285)
154	155	(1)	45,900	45,900	-	1,890,000	1,883,034	6,966	1,936,054	1,929,089	6,965
-	152,894	(152,894)	85,949	43,501	42,448	1,508,933	1,561,807	(52,874)	1,594,882	1,758,202	(163,320)

Organizaiton

Outline

The Institute for Global Environmental Strategies (IGES)

Establishment

March 31, 1998

Location

Headquarter

2108-11 Kamiyamaguchi, Hayama-machi, Miura-gun, Kanagawa 240-0115 (From June 2002)

Tokyo Office

Nippon Press Center Bldg. 8F, 2-2-1 Uchisaiwai-cho Chiyoda-ku, Tokyo 100-0001

Kitakyushu Office

Kitakyushu International Conference Center 6F, 3-9-30 Asano, Kokurakita-ku, Kitakyushu-city, Fukuoka 802-0001

Kansai Research Center

International Health Development Centre Bldg. (IHD Bldg.) 5F, 1-5-1 Wakinhama Kaigan Dori Chuo-ku, Kobe, Hyogo 651-0073

Chair of the Board of Directors Prof. Akio Morishima (President of the Central Environment Council)

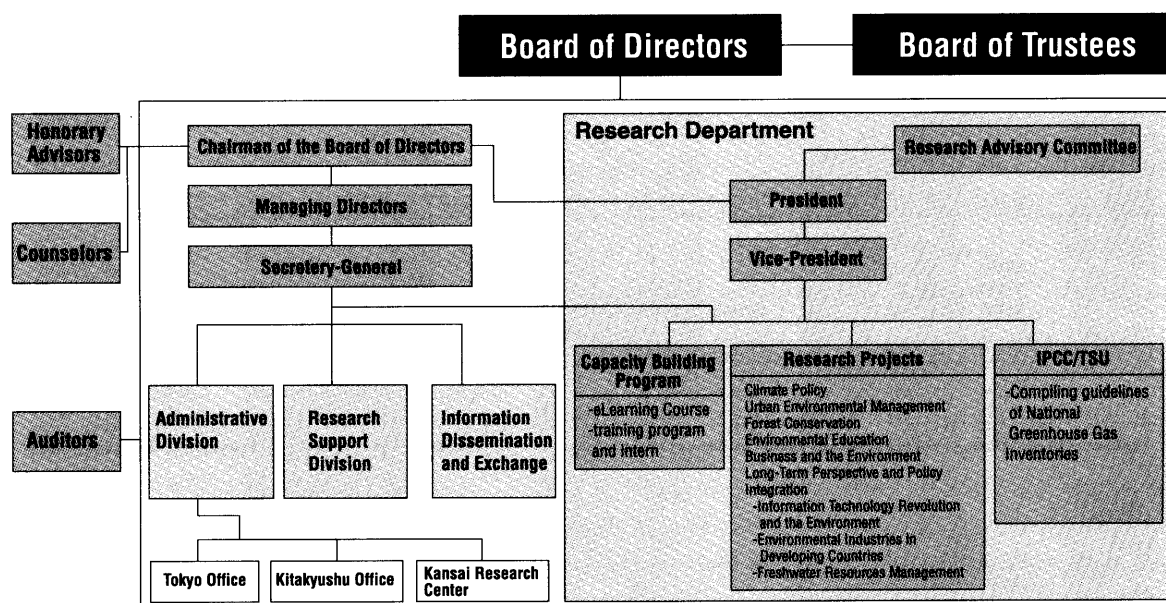
Number of Employees (as of March, 2002)

Research staff : 41 full-time staff (14 are non-Japanese), 22 part-time staff Total : 63

Secretariat staff : 41 full-time staff (2 are non-Japanese), 4 part-time staff Total : 45

Working Languages Japanese and English

Organization Chart



i. List of Members of the Boards of FY2001

■ Directors

Prof. Akio Morishima (Chair)	President, Central Environment Council
Mr. Nobuo Mizuguchi (Vice Chair)	Vice Governor, Kanagawa Prefectural Government
Dr. Akihiro Amano	Professor of Economics, School of Policy Studies, Kwansei Gakuin University
Dr. Keith Bezanson	Director, Institute of Development Studies, University of Sussex
Dr. Edith Brown Weiss	Francis Cabell Brown Professor of International Law, Georgetown University Law Center
Dr. Peter de Janosi	Senior Advisor, LEAD International
Mr. Yasuo Goto	Chairman Emeritus, The Yasuda Fire & Marine Insurance Co., Ltd.
Dr. Ryokichi Hirono	Professor Emeritus, Seikei University
Dr. Hidefumi Imura	Professor, Graduate School of Environmental Studies, Nagoya University
Prof. Hiroyuki Ishi	Professor, Department of Frontier Science, The University of Tokyo
Dr. Yoichi Kaya	Professor, Keio University
Ms. Charmine Koda	Journalist
Dr. Hoesung Lee	President, Council on Energy and Environment Korea
Dr. Tongroj Onchan	President, Mekong Environment and Resource Institute
Dr. Yasuyuki Oshima	President, Japan Wildlife Research Center
Dr. Rajendra K. Pachauri	Director, Tata Energy Research Institute
Dr. Kirit S. Parikh	Emeritus Professor, Indira Gandhi Institute of Development Research
Dr. Manfred Stock	Deputy Director, Potsdam Institute for Climate Impact Research
Dr. Yoshinori Yasuda	Professor, International Research Center for Japanese Studies
Prof. Kun Zhang	Director General, The Sino-Japan Friendship Center for Environmental Protection

■ Auditors

Mr. Akio Matsubara	Director, Member of the Board, Toyota Motor Corporation
Mr. Isao Yamashita	Managing Executive Officer, The Bank of Yokohama, Ltd.

■ Trustees

Dr. Borjigd Ts. Adyasuren	Advisor to the Minister of Environment, Ministry of Nature and Environment
Mr. Tomohide Akiyama	Director, Japan International Forestry Promotion & Cooperation Center
H. E. Mr. Heherson T. Alvarez	Secretary, Department of Environment and Natural Resources, The Government of the Philippines
Mr. Nirmal Andrews	Regional Director and Representative for Asia and the Pacific, United Nations Environment Programme (UNEP/ROAP)
Dr. Marcel A. Boisard	Executive Director, United Nations Institute for Training and Research
Dr. Ralph Chapman	Manager, Strategic Policy Group, Ministry for the Environment
Mr. Chartree Chueyprasit	Director General, Department of Environmental Quality Promotion, Ministry of Science, Technology and Environment
Dr. Nigel Cross	Executive Director, International Institute for Environment and Development
Mr. Gerard Early	Head, Approvals and legislation Division, Environment Australia
Dr. Nobuyoshi Fugono	President, Advanced Telecommunications Research Institute International
Mr. Shinji Fukukawa	Chief Executive Officer, Dentsu Institute for Human Studies, Dentsu Inc.
Dr. William Glanville	Vice-President & Chief Operating Officer, The International Institute for Sustainable Development
Mr. Takeshi Hara	Professor, Waseda University, Graduate School of Asia-Pacific Studies
Mr. Yoshio Hatano	President, Foreign Press Center Japan
Dr. Peter Hennicke	Acting President, Wuppertal Institute for Climate, Environment and Energy
Mr. Takuya Hirano	President, Japan Marine Science & Technology Center

Mr. Masami Ishizaka	Executive Vice President, Japan National Oil Corporation
Dr. Roger E. Kasperson	Executive Director, Stockholm Environment Institute
Mr. Yo Kimura	Director, United Nations Centre for Regional Development
Mr. Jonathan Lash	President, The World Resources Institute
Mr. Shigeo Masui	Editorial Writer, The Yomiuri Shimbun
Mr. Tadahiro Mitsuhashi	Professor, Chiba University of Commerce, Faculty of Policy Informatics
H. E. Mr. Khieu Muth	General Director, Ministry of Environment, Kingdom of Cambodia
Mr. Tomomitsu Oba	Chairman, Japan Center for International Finance
Dr. Gen Ohi	Director General, National Institute for Environmental Studies
Mr. Hitoshi Osaki	Director General, Center for National University Finance
Ms. Norine Smith	Assistant Deputy Minister, Policy and Communications , Environment Canada
Dr. R.T.M. Sutamihardja	Advisor, State Ministry of Environment
Dr. Francisco Szekely	Deputy Minister, Ministry of Environment, Mexico
Dr. Ruqiu Ye	Senior Advisor to the Minister, China State Environmental Protection Administration
Mr. A. H. Zakri	Director, The United Nations University/Institute of Advanced Studies

■ Honorable Advisors

Mr. Gaishi Hiraiwa	Honorary Chairman; Chairman, Keidanren; Global Environmental Action
Mr. Toshiki Kaifu	Advisor, Global Environmental Action; Former Prime Minister
Dr. Ichiro Kato	Former President, The University of Tokyo,
Dr. Jiro Kondo	Chairman, The Science and Technology Foundation of Japan
Mr. Tomiichi Murayama	Advisor, Global Environmental Action; Former Prime Minister
Dr. Jun-ichi Nishizawa	President, Iwate Prefectural University
Mr. Geping Qu	Chairman of the Council of Environmental and Resources Protection, National People's Congress
Dr. Emil Salim	Former State Minister for Population and Environment
Dr. Stephan Schmidheiny	Vice-Chairman, Executive Committee, World Business Council for Sustainable Development
Mr. James Gustave Speth	Dean, Yale University School of Forestry and Environmental Studies
Mr. Maurice Strong	Chairman, The Earth Council
Dr. M. S. Swaminathan	Chairman, M. S. Swaminathan Research Institute
Dr. Klaus Toepfer	Executive Director, United Nations Environment Programme
Dr. Takeshi Umehara	Honorary Advisor, International Research Center for Japanese Studies

■ Counselors

Mr. Tomohide Akiyama	Chairman of the Board of Directors, Japan International Forestry Promotion & Cooperation Center
Dr. Nobuyoshi Fugono	President, Advanced Telecommunications Research Institute International
Mr. Shinji Fukukawa	Chief Executive Officer, Dentsu Institute for Human Studies, Dentsu Inc.
Mr. Takeshi Hara	Professor, Waseda University, Graduate School of Asia-Pacific Studies
Mr. Yoshio Hatano	President, Foreign Press Center Japan
Mr. Takuya Hirano	President, Japan Marine Science & Technology Center
Dr. Yoshinori Ishii	President, Institute for Environmental Promotion in Asia
Mr. Masami Ishizaka	Executive Vice President, Japan National Oil Corporation
Mr. Kunio Kubodera	Speaker, Kanagawa Prefectural Assembly
Mr. Tadahiro Mitsuhashi	Professor, Chiba University of Commerce, Faculty of Policy Informatics
Mr. Shigeyuki Okajima	Executive Director, Japan Environmental Education Forum
Mr. Tomomitsu Oba	Chairman, Japan Center for International Finance
Mr. Hitoshi Osaki	Director General, The Society for Promotion of the University of the Air

■ Research Advisory Committee Members

Dr. Keith Bezanson	Director, Institute of Development Studies (IDS), University of Sussex
Dr. Gerardo Budowski	Vice Rector, University for Peace
Prof. Lin Sien Chia	Associate Senior Research Fellow, Institute of Southeast Asian Studies (ISEAS)
Prof. Martin Claussen	Head of Climate System Department, Potsdam Institute for Climate Impact Research (PIK)
Dr. Nigel Cross	Executive Director, International Institute for Environment and Development
Dr. William Glanville	Vice President & Chief Operating Officer, The International Institute for Sustainable (IISD)
Mr. Kotaro Kimura	Executive Director, Global Industrial and Social Progress Research Institute (GISPRI)
Dr. Wha-Jin Han	Director, Global Environmental Research Center, Korea Environment Institute
Dr. Kheng-Lian Koh	Director, Asia-Pacific Centre for Environmental Law (APCEL)
Mr. Philip Mathews	Assistant Director General, Institute of Strategic and International Studies (ISIS)
Dr. Tsuneyuki Morita	Director, Social Environmental System Division, National Institute for Environmental Studies
Dr. Edda Muller	Deputy Director, European Environment Agency
Dr. Nebjosa Nakicenovic	Leader, Environmentally Compatible Energy Strategies Project, International Institute for Applied Systems Analysis (IIASA)
Dr. Jin-Gyu Oh	Director, Center for Climate Change Studies, Korea Energy Economics Institute
Dr. Tongroj Onchan	President, Mekong Environment and Resource Institute
Dr. Jyoti K. Parikh	Senior Professor, Indira Gandhi Institute of Development Research
Dr. Leena Srivastava	Director, Regulatory Studies and Governance Division, Tata Energy Research Institute
Dr. Chalongphob Sussangkarn	President, Thailand Development Research Institute Foundation
Dr. Francisco Szekely	Deputy Minister, Ministry of Environment, Mexico
Mr. Guang Xia	Deputy Director, Department of Environmental Strategy and Policy Research, The Sino-Japan Friendship Center for Environmental Protection

ii. List of Employees of FY2001

■ Research Department

Climate Policy Project

Project Leader	Shuzo Nishioka
Senior Research Fellow	Naoki Matsuo
Research Fellow	Tae Yong Jung
Research Associate	Aki Maruyama
Research Associate	So Won Yoon
Research Associate	Yasushi Ninomiya
Research Associate	Rie Watanabe
Research Associate	Wakana Takahashi
Visiting Researcher	Sum Thy
Visiting Researcher	Vladimir Kotov
Visiting Researcher	Elena Nikitina
Project Secretary	Miya Iwase
Project Secretary	Tomoko Miyazaki

Urban Environmental Management Project

Project Leader	Hidehumi Imura
Research Fellow	Bai Xuemei
Research Fellow	Kwon Changki
Research Associate	Shinji Kaneko
Research Associate	Kosuke Araki
Research Associate	Shobhakar Dhakal
(Kitakyushu)	
Research Associate	Chang Miao
(Kitakyushu)	
Project Secretary	Kyoko Takada

Forest Conservation Project

Project Leader	Makoto Inoue
Research Fellow	Martinus Nanang
Research Fellow	Satoshi Tachibana
Research Associate	Kimihiko Hyakumura
Research Associate	Kiyoshi Komatsu
Visiting Researcher	Hiroji Isozaki
Visiting Researcher	Hiroaki Kakizawa
Visiting Researcher	Shin Nagata
Visiting Researcher	Satoru Matsumoto
Visiting Researcher	Sachie Okamoto
Project Secretary	Saho Moriguchi

Environmental Education Project

Project Leader	Osamu Abe
Senior Research Fellow	Bishnu Bhandari
Research Associate	Masahiro Takahashi
Research Associate	Akihiro Nakahata
Visiting Researcher	Ranjana Saikia
Project Secretary	Tomoe Karasawa

Long-Term Perspective and Policy Integration Project

Project Leader	Yoshihiro Natori
Project Leader	Kazuo Matsushita
Sub Project Leader	Takashi Matsumura
Research Fellow	Kenichi Imai
Research Associate	Taeko Takahashi
Research Associate	Takashi Otsuka
Research Associate	Ko Nomura
Research Associate	Shuzo Katsumoto
Research Associate	Yatsuka Kataoka
Research Associate	Moustapha Kamal Gueye
Research Associate	Lisa Hiwasaki
Research Associate	Maki Sato
Visiting Researcher	Jan-Dirk Seiler Hausmann
Intern	Yu Takeuchi
Project Secretary	Naoko Miyazaki

Business and the Environment Project (Kansai Research Center)

Project Leader	Katsuhiko Kokubu
Research Fellow	Eriko Nashioka
Research Fellow	Yasuhiro Kanda
Research Fellow	Kenjiro Hirayama
Senior Visiting Researcher	Masaji Kitamura
Senior Visiting Researcher	Shinichi Imai
Visiting Researcher	Yasuhisa Nakaso
Visiting Researcher	Koichiro Saio
Project Secretary	Mami Tachibana

Capacity Building Programme

Programme Manager	Glen Paoletto
Programme Manager	Andrea Deri
	(Feb. 2002~)
Research Associate	Masahisa Sato
Web Management Officer	Reiko Koyama
LEAD Research Intern	Eldar Kurbanov
LEAD Research Intern	Andrea Deri
	(Feb. 2001~May. 2001)
Project Secretary	Soon-deok Park
Project Secretary	Mami Takanarita

IPCC/TSU

Head	Riitta K. Pipatti
Programme Officer	Leandro Buendia
Programme Officer	Todd Ngara
Programme Officer	Kiyoto Tanabe
Administrative Officer	Kyoko Miwa
Project Secretary	Akiko Kawase

Consultant

Takahiko Hiraishi
Kazuo Watanabe
Hisakazu Kato
Yohei Harashima
Kazuo Matsushita

■ Secretariat

Chair of the Board of Directors Akio Morishima

Secretary General Shinichi Arai

Deputy Secretary General Makoto Tsuruta

Administrative Section

Head of Administrative Section Hiroshi Yamagishi

Head of Welfare Section Isao Sato

Head Hideki Oda

Head Akie Narita

Secretary to Administrative Section Aoi Oride

Yuji Shimizu

Mamoru Suzuki

Junko Iwagami

Miyuki Kawai

Research Support Section

Head of Research Support Section Masami Yamamori

Head Yuko Tanno

Kazuhisa Shimada

Tsuyoshi Oishi

Tomoko Ishikawa

Yoshie Ito

Emika Yoshitaki

Megumi Yajima

Maki Fujiwara

Edwin Wang

Grace Impey

David Crosbie

Kansai Research Center

Director Akihiro Amano

Advisor Ryutaro Yatsu

Head of Research Planning and Akira Yoshida

Administrative Department

Tokyo Office

Kazuko Watanabe

Sumiyo Morita

Tatsuko Kumamoto

Tokyo Office Annex

Senior Research Fellow Ikuo Sano

Kimio Hayasaka

Takako Sato

Ayako Yokoyama

Yuko Nagasawa

Kitakyushu Office

Director Hidefumi Imura

Division Head Keiko Sasaki

Division Chief Osamu Norimatsu

Division Chief Christine Pearson

iii. Signatory organizations and institutions of the Charter for the Establishment of IGES (In alphabetical order, as of March 2002)

[National Administrative Organizations] 13 Organizations

- 1 Ministry of the Environment, Japan
- 2 Department of the Environment, Australia
- 3 Ministry of Environment, Cambodia
- 4 Ministry of Environment, Canada
- 5 State Environmental Protection Administration, China
- 6 Ministry of Environment and Forests, India
- 7 State Ministry of Environment, Indonesia
- 8 Ministry of Population and Environment, Nepal
- 9 Ministry of Nature and the Environment, Mongolia
- 10 Ministry of Environment, Korea
- 11 Ministry for the Environment, New Zealand
- 12 Department of Environment and Natural Resources, the Philippines
- 13 Ministry of Science, Technology and the Environment, Thailand



[International Organizations] 4 Organizations

- 1 United Nations Centre for Regional Development
- 2 United Nations Environment Programme
- 3 United Nations Institute for Training and Research
- 4 Institute of Advanced Studies, The United Nations University



[Research and Academic Institutions] 23 Organizations

- 1 Asia-Pacific Centre for Environmental Law, Singapore
- 2 The Earth Council, Costa Rica
- 3 Global Industrial and Social Progress Research Institute, Japan
- 4 Indra Gandhi Institute of Development Research, India
- 5 Institute of Development Studies, University of Sussex, United Kingdom
- 6 Institute of Southeast Asian Studies, Singapore
- 7 Institute of Strategic and International Studies (ISIS) Malaysia, Malaysia
- 8 International Academy of the Environment, Switzerland
- 9 The International Global Change Institute, the University of Waikato, New Zealand
- 10 International Institute for Environment and Development, United Kingdom
- 11 The International Institute for Sustainable Development, Canada
- 12 International Institute of Applied Systems Analysis, Austria
- 13 Korea Energy Economics Institute, Republic of Korea
- 14 Korea Environment Institute, Republic of Korea
- 15 National Institute for Environmental Studies, Japan
- 16 Potsdam Institute for Climate Impact Research, Germany
- 17 The Sino-Japan Friendship Center for Environmental Protection, China
- 18 Stockholm Environment Institute, Sweden
- 19 Tata Energy Research Institute, India
- 20 Thailand Development Research Institute Foundation, Thailand
- 21 Thailand Environment Institute, Thailand
- 22 The World Resources Institute, United States of America
- 23 Wuppertal Institute for Climate, Environment and Energy, Germany



Articles of Association for the Institute for Global Environmental Strategies

Authorized by the Governor of Kanagawa Prefecture on April 21, 1997

Amendments Approved by the Prime Minister of Japan on March 31, 1998

Amended on February 23, 2001

Amended on August 20, 2002

Chapter 1 General Provisions

(Name)

Article 1

This institute shall be called the Institute for Global Environmental Strategies (hereinafter "the Institute").

(Office)

Article 2

1. The headquarters of the Institute shall be situated at 2108-11, Kami Yamaguchi, Hayama-machi, Miura-gun, Kanagawa Prefecture.
2. The Institute may establish other offices where needed upon resolution of the Board of Directors.

(Objectives)

Article 3

The Institute, based on the Charter for the Establishment of the Institute for Global Environmental Strategies (hereinafter "the Charter"), shall strive to carry out policy oriented research and related activities to develop and formulate innovative policy instruments and environmental strategies for sustainable development ("Strategic Research"), aiming at creating a new paradigm for global civilization; and to make the results of the Strategic Research applicable for the policy making and decision making of a broad range of entities so that sustainable development can be achieved globally, inter alia in the Asia-Pacific Region.

(Activities)

Article 4

In order to achieve the objectives outlined in the preceding article, the Institute shall undertake the following business activities:

- 1) conduct Strategic Research, including joint research with international organizations, national and local governments, research and academic institutions, corporations, and NGOs (hereinafter "other organizations");
- 2) conduct Strategic Research in response to requests from other organizations; and provide information and recommendations on the formulation of strategies for sustainable development to those bodies as required;
- 3) convene international conferences and seminars and conduct other capacity building activities (this includes co-sponsorship with other organizations);
- 4) participate in conferences where various policies and decisions are determined and offer proposals based on the results of its Strategic Research;

- 5) invite researchers from other research and academic institutions others to participate in research, and provide training courses in areas related to the creation of strategies;
- 6) collect, arrange, and provide information related to sustainable development; and
- 7) carry out any further necessary activities to achieve the objectives of the Institute.

(Working languages)

Article 5

Working languages of the Institute shall be English and Japanese.

Chapter 2 Assets and Accounting

(Composition of assets)

Article 6

1. The assets of the Institute shall be comprised of the following:
 - 1) assets recorded in the List of Property as of the establishment of the Institute;
 - 2) assets received as donations from corporations or individuals after establishment;
 - 3) voluntary contributions from governmental agencies, local governments of Japan and other interested countries;
 - 4) grants from private foundations and others;
 - 5) income generated from existing assets;
 - 6) income from fees paid by affiliates;
 - 7) income from regular activities; and
 - 8) any other income.

(Classification of assets)

Article 7

1. The assets of the Institute shall consist of the Principal Fund and the Operating Resources.
2. The Institute's Principal Fund shall be composed of the following:
 - 1) assets listed in the Principal Fund category in the List of Property as of establishment;
 - 2) assets donated specifically to the Principal Fund; and
 - 3) assets that are transferred to the Principal Fund by resolution of the Board of Directors.
3. The Operating Resources shall be those other than the Principal Fund.

(Administration of the assets)

Article 8

1. The assets of the Institute shall be administered by the Chair of the Board of Directors using methods decided by the Chair upon resolution of the Board of Directors.
2. Cash contained in the Principal Fund and the Strategic Research Fund must be preserved using safe and reliable methods that include establishing postal time-deposit accounts or bank time-deposit accounts; entrusting the funds with a trust bank; or purchasing government or corporate bonds.

(Restrictions on the disposal of the Principal Fund)

Article 9

The Principal Fund may not be disposed of or used as collateral. However, in the case where there are unavoidable circumstances when carrying out the activities of the Institute, a portion of the Principal Fund may be disposed of, or all or a portion of the Principal Fund may be used as collateral upon resolution of two-thirds or more of the current number of members of the Board of Directors, with the approval of the Board of Trustees and the approval of the Minister of the Environment

(Strategic Research Fund)

Article 10

1. The Strategic Research Fund shall be set up to ensure that operations are carried out smoothly.
The Strategic Research Fund shall be composed of the following categories of assets:
 - 1) donated assets designated as assets for the Strategic Research Fund; and
 - 2) assets that are transferred to the Strategic Research Fund by resolution of the Board of Directors.
2. The Strategic Research Fund may not be disposed of or used as collateral. However, in the case where there are unavoidable circumstances when carrying out the activities of the Institute, upon resolution of two-thirds or more of the current number of members of the Board of Directors and with the approval of the Board of Trustees a portion of the Strategic Research Fund may be disposed of or, all or a portion of the Strategic Research Fund may be used as collateral

(Payment of expenses)

Article 11

The expenses of the Institute shall be paid from the Operating Resources.

(Business plans and budget)

Article 12

The documents for the Institute's annual business plans and the annual budget necessary for such business plans shall be prepared by the Chair of the Board of Directors. Prior to the start of each fiscal year, these documents must be sub-

mitted to the Minister of the Environment upon resolution of more than one-half of the current number of the members of the Board of Directors after receiving the comments by the Board of Trustees. Any revisions to these documents must also follow the same process.

(Provisional budget)

Article 13

1. Notwithstanding the provisions of the preceding article, when the budget for income and expenditures is not formulated due to compelling reasons, the Chair of the Board of Directors may, upon resolution of the Board of Directors, exercise control over revenue and expenses in accordance with the budget of the previous fiscal year until a new budget is formulated.
2. The budget for revenue and expenses referred to in the preceding clause shall become the revenue and expenditures for the newly formulated budget.

(Business reports and settlement of revenue and expenses)

Article 14

1. The Institute's business reports and settlement statements shall be prepared by the Chair of the Board of Directors at the end of each fiscal year and shall include the Business Report, Statements of Revenue and Expenses, Report on Changes in Net Assets, Balance Sheets, and the List of Property. After receiving the auditor's inspection and upon resolution of more than one-half of the current number of the members of the Board of Directors, these documents must be reported to the Board of Trustees and they, within three months after the close of the fiscal year, must be submitted to the Minister of the Environment. In this case, if any revisions were made to the amount of the total of assets, it should be registered within two weeks, and a certified copy of the registration should be attached to these documents.
2. When there are surplus funds in the Institute's revenue and expenses settlement, upon resolution of the Board of Directors all or a portion of this surplus shall be transferred into the Principal Fund or appropriated forward to the next fiscal year.

(Long-term borrowings)

Article 15

When the Institute seeks to borrow funds, upon resolution of two-thirds or more of the current number of members of the Board of Directors and with the approval of the Board of Trustees, authorization must be obtained from the Minister of the Environment, except for the payment of short-term borrowings with income from that fiscal year.

(Assumption of responsibilities and waiver of rights)

Article 16

In cases corresponding to the provision of Article 9 or provisions in previous articles and with the exception of those

matters determined by the budget for revenue and expenses, notice must be served to the Minister of the Environment upon resolution of more than one-half of the current number of the members of the Board of Directors and with the approval of the Board of Trustees, when the Institute seeks to assume additional responsibilities or waive rights.

(Fiscal year)

Article 17

The Institute's fiscal year shall begin on April 1 of each year and end on March 31 of the following year.

Chapter 3 Officers

(Types and number of officers)

Article 18

1. The Institute shall have the following officers:

1) Directors

The Institute shall have at least 15 and no more than 25 Directors.

2) Auditors

There shall be two Auditors.

2. Among the Directors, one-half of the current number of Directors plus one shall be persons of Japanese nationality. In the case the current number is odd, the terms "the current number of Directors" shall signify "the current number minus one".

3. Among the Directors, there shall be one Chair of the Board of Directors.

4. Among the Directors, there shall be one or two Vice-Chair(s).

5. Among the Directors, there shall be one President.

6. Among the Directors, there may be one Vice-President.

7. Among the Directors, there shall be one Managing Director.

(Elections and other matters)

Article 19

1. The Directors and Auditors shall be elected by the Board of Trustees.

2. The Directors shall mutually elect the Chair of the Board of Directors, one or two Vice-Chair(s), the President, the Vice-President and the Managing Director.

3. The Directors, Auditors, and Trustees cannot simultaneously serve in another position.

4. The number of Directors that are relatives or have special mutual relations shall not exceed one-third of the total number of Directors.

5. The Auditors shall not be relatives or have special mutual relationships.

6. Any changes among the Directors shall be registered within two weeks and reported without delay to the Minister of the Environment together with a certified copy of the register.

7. Any changes among Auditors shall be reported without delay to the Minister of the Environment.

(Duties)

Article 20

1. The Chair of the Board of Directors shall represent the Institute and exercise general control over the business thereof.

2. The Vice-chair(s) shall assist the Chair of the Board of Directors and in the event that the Chair becomes incapacitated or is absent, a designated Vice-Chair shall execute the duties of the office of the Chair in accordance with the previously determined intentions of the Chair in an order determined by resolution of the Board of Directors.

3. The President shall direct the operation of Strategic Research, its related training and other matters of the Institute as stipulated in Article 42.

4. The Vice-President shall assist the President and execute the duties of the office of the President in the event that the President becomes incapacitated or is absent.

5. The Managing Director shall assist the Chair of the Board of Directors and the Vice-Chair(s) and shall, under the guidance of the Chair and the Vice-Chair(s), exercise control over and dispose of the ordinary business of the Institute which is not within the duties of the office of the President.

6. The Directors shall comprise the Board of Directors, and they must resolve matters related to the business of the Institute in accordance with the provisions under these Articles of Association.

(Duties of the Auditors)

Article 21

The Auditors shall:

1) audit assets and accounting;

2) audit the execution of business activities by the Directors;

3) report irregularities found through the auditing of assets, accounting, and the execution of business activities to the Board of Directors and the Board of Trustees, or Minister of the Environment; and

4) when it is necessary to report on matters in the preceding item, request a convening of or convene the meetings of the Board of Directors and the Board of Trustees.

(Terms of office)

Article 22

1. The terms of office for the Officers shall be three years. However, officers shall not be prevented from being reelected to a second term.

2. The terms of office for Officers who are elected as replacements or elected as additional Officers shall be the time remaining in the term of any predecessor or the same

as the terms of the present Officers.

3. Even after resigning or following the expiration of a term of office, Officers must carry out the duties of their position until a successor takes office.

(Dismissal)

Article 23

When one of the following matters applies to an Officer, the Officer may be dismissed by resolutions of at least two-thirds majorities of both the Board of Directors or the Board of Trustees, based on the current number of Directors or Trustees. In the case of such dismissal, an opportunity must be given to the officer for exculpation prior to a vote on a resolution of the Board of Directors and the Board of Trustees.

- 1) When it is recognized that the Officer is unable to execute the duties of the position because of psychological or physical problems
- 2) When it is recognized that the officer has violated an obligation of the duties of the position or if the Officer carries out any activity that is inappropriate for an Officer

(Remuneration and others)

Article 24

1. Officers shall not be remunerated. However, full-time officers may be remunerated.
2. Officers may be reimbursed for expenses.
3. The Chair may decide on reimbursement for necessary matters related to the preceding two clauses upon resolution of the Board of Directors.

Chapter 4 The Board of Directors

(Composition)

Article 25

The Board of Directors shall consist of Directors.

(Authority)

Article 26

In addition to matters separately determined by the provisions under these Articles of Association, the Board of Directors shall decide on and execute all matters of importance related to the business activities of the Institute.

(Types and convening of the meetings of the Board of Directors)

Article 27

1. There shall be two types of meetings of the Board of Directors: the ordinary meeting of the Board of Directors and the extraordinary meeting of the Board of Directors.
2. The ordinary meeting of the Board of Directors shall convene twice each year.
3. The extraordinary meeting of the Board of Directors shall convene in any of the following cases:
 - 1) when the Chair of the Board of Directors recognizes

that such a convening is necessary;

- 2) when there is a request to convene by one-third or more of the current number of members, with a request stating in writing the purpose of the convening of the Board of Directors; and
- 3) when there is a request to convene by an Auditor, as stipulated in item 4 of Article 21.

(Calling of Meetings)

Article 28

1. The Chair of the Board of Directors shall call meetings of the Board of Directors.
2. The Chair of the Board of Directors must call the extraordinary meetings of the Board of Directors within 20 days in the case of items 2 and 3 of clause 3 in the preceding Article.
3. When calling of the ordinary meeting of the Board of Directors, notification in writing that states the time and date, place, purpose, and articles for deliberation must be made at least 30 days prior to the convening of the meeting. However, this shall not apply when all Directors agree to convene the meeting.

(Chair of meeting)

Article 29

The Chair of the Board of Directors shall also serve as meeting chair.

(Quorum)

Article 30

Meetings of the Board of Directors may not be convened unless more than a half of the current number of Directors are in attendance.

(Resolutions)

Article 31

Except as otherwise provided for by the provisions in these Articles of Association, the resolutions of the meeting of the Board of Directors shall be decided upon by a majority vote of the Directors. In the case of an equal number votes for approval and disapproval, the matter shall be decided by the Chair of the meeting.

(Voting in writing and others)

Article 32

1. Any Director unable to attend the meeting due to unavoidable circumstances may vote in writing on the matters on which notification has been made beforehand, or another Director may be commissioned to vote as a proxy for the absent Director.
2. With regard to the application of provisions in the preceding two articles in the case where a Director is unable to attend as stipulated in the preceding clause, the Director shall nevertheless be regarded as having attended the meeting.

(Minutes)

Article 33

1. The minutes of the meetings of the Board of Directors shall be prepared and must contain the following matters:
 - 1) The date, time, and place of meeting
 - 2) The current number of Directors, the names and number of Directors in attendance. (Persons voting in writing and commissioned to vote by proxy shall be noted in the minutes.)
 - 3) Matters deliberated and matters voted on
 - 4) A summary and the results of the proceedings
 - 5) Matters relating to the election of signatories to the minutes
2. The Chair of the meeting and two or more persons elected to sign the minutes of the meeting must sign and affix their seals to the minutes.

Chapter 5 Trustees and the Board of Trustees

(Trustees)

Article 34

1. The Institute shall have at least 25 and no more than 35 Trustees.
2. Trustees shall be elected by the Board of Directors, and shall be commissioned by the Chair of the Board of Directors.
3. The Trustees shall be the persons commissioned by national administrative organizations and international organizations that have signed the Charter or persons of knowledge and experience.
4. The provisions in Articles 22,23, and 24 shall be applied mutatis mutandis to the Trustees. In this case, the term "officer" used in these articles shall read as "Trustee."

(Board of Trustees)

Article 35

The Board of Trustees shall be composed of Trustees.

(Authority of the Board of Trustees)

Article 36

The Board of Trustees shall carry out the duties stipulated in these Articles of Association, deliberate and provide advice to the Chair of the Board of Directors on matters related to the business of the Institute, in response to requests from the Chair of the Board of Directors or when the Board of Trustees recognizes that such deliberation and advice are needed.

(Calling of Meeting)

Article 37

1. Meeting of the Board of Trustees shall be called by the Chair of the Board of Directors.
2. The Chair of the Board of Directors must convene the

Board of Trustees within 20 days, when there is a written request stating the purpose to convene by one-third or more of the current number of Trustee members.

(Election of the Chair)

Article 38

The Chair of the meeting of the Board of Trustees shall be mutually elected by the Trustees.

(Quorum, resolutions and voting in writing and others)

Article 39

The provisions in Articles 30 to 33 shall be applicable mutatis mutandis to the Trustees. In this case, the terms "Board of Directors" and "Directors" used in the mentioned articles shall read as "Board of Trustees" and "Trustees".

(Other)

Article 40

In addition to the provisions in this article, the Board of Directors shall determine necessary matters related to the operation of the Board of Trustees.

Chapter 6 Honorary Advisors and Counselors

(Honorary Advisors and Counselors)

Article 41

1. The Institute may have Honorary Advisors and Counselors.
2. Honorary Advisors and Counselors shall be appointed by the Chair of the Board of Directors upon the recommendation of the Board of Directors.
3. The Honorary Advisors shall respond to inquiries from the Chair of the Board of Directors regarding basic matters and may provide advice to the President.
4. The Counselors shall respond to inquiries from the Chair of the Board of Directors regarding important business matters and may provide advice to the President.
5. The terms of office for both the Honorary Advisors and the Counselors shall be three years. However, the Honorary Advisors and the Counselors are not prevented from being reappointed.

Chapter 7 Research Structure

(Duties of the President)

Article 42

The president shall execute the following duties based on resolutions made by the Board of Directors:

- 1) decide on Strategic Research plans and manage their implementation;
- 2) prepare annual reports on Strategic Research and its related training and report to the members of both the

Board of Directors and the Board of Trustees;

- 3) appoint and dismiss research fellows and other related staff;
- 4) decide on necessary matters related to Strategic Research and its related training;
- 5) direct the operation of Strategic Research and its related training.

(Research Advisory Committee)

Article 43

1. The Institute shall have a Research Advisory Committee which is an advisory body for promotion of Strategic Research.
2. The Research Advisory Committee provides the President with advice on matters related to promotion of Strategic Research, such as decisions on Strategic Research plans and management of their implementation.
3. The Members of the Research Advisory Committee shall be appointed by the Chair of the Board of Directors in consultation with the President.
4. The Members of the Research Advisory Committee shall be the persons commissioned by research and academic institutions that have signed the Charter or persons of knowledge and experience.
5. The terms of office for the Members of the Research Advisory Committee shall be three years. However, the Members are not prevented from being reappointed.
6. The terms of office for the Members of the Research Advisory Committee who are elected as replacements or elected as additional Members shall be the time remaining in the term of any predecessor or the same as the terms of the present Members.
7. In addition to matters stipulated in the preceding clauses, necessary matters related to the Research Advisory Committee shall be decided by the Chair of the Board of Directors subject to resolution of the Board of Directors.

(Research fellows and other related staff)

Article 44

1. The Institute shall have senior research fellows, research fellows, research associates and visiting research fellows.
2. Visiting research fellows shall belong to other organizations and engage in the Strategic Research.
3. The senior research fellows, research fellows, research associates and visiting research fellows shall be appointed and dismissed by the President.
4. Necessary matters related to senior research fellows and others shall be decided by the President subject to resolution of the Board of Directors.

(Trainees)

Article 45

1. In addition to those persons belonging to the Institute, the Institute may have other persons participate in the Strategic Research as trainees.

2. Necessary decisions regarding trainees shall be made by the President subject to resolution of the Board of Directors.

Chapter 8 Secretariat

(Establishment)

Article 46

1. A Secretariat shall be installed to carry out the business of the Institute.
2. The Secretariat shall have a Secretary-General and necessary staff.
3. The Secretary-General and staff shall be appointed and dismissed by the Chair of the Board of Directors. Upon appointment or dismissal of staff involved in research activities, however, the Secretary General shall consult the President.
4. The Chair of the Board of Directors shall decide on matters necessary for the Institute and operation of the Secretariat subject to resolution of the Board of Directors.

(Books and documents to be furnished)

Article 47

The office of the Secretariat must always keep the following records and documents:

- 1) the Articles of Association for the Institute;
- 2) a list and the resumes of Directors, Auditors, Trustees, Members of Research Advisory Committee, Research Fellows, Research Associates and other staff;
- 3) documents on permission, authorization, and registration;
- 4) documents on the proceedings of the Institute set forth in the Articles of Association;
- 5) records and documentary evidence for revenue and expenses;
- 6) documents indicating the status of the assets and liabilities and the situation regarding net assets; and
- 7) other necessary documents and records.

Chapter 9 Affiliates

(Affiliates)

Article 48

1. Individual persons and corporations who endorse the objectives and activities of the Institute may become affiliates of the Institute according to the rules determined by the Chair of the Board of Directors upon resolution by the Board of Directors.
2. The affiliates can participate in the business activities of the Institute and obtain information on results of Strategic Research and related matters.
3. The affiliates shall pay the prescribed fees according to the rules stipulated in clause 1 of this Article.

Chapter 10 Amendments to the Articles of Association and Dissolution of the Institute

(Amendments to the Articles of Association)

Article 49

These Articles of Association may be amended only with the approval of the Minister of the Environment after approval by three-fourths or more of the current number of members of the Board of Directors and three-fourths or more of the current number of members of the Board of Trustees.

(Dissolution)

Article 50

The Institute may be dissolved only in accordance with the provisions set forth in items 2 through 4 of clause 1 under Article 68 of the Japanese Civil Law and with the approval of the Minister of the Environment after resolution of three-fourths or more of the current number of members of the Board of Directors and three-fourths or more of the current number of members of the Board of Trustees.

(Disposition of residual assets)

Article 51

The residual assets at the time of the dissolution of the Institute shall be donated to institutions that operate with similar objectives or returned to the party which donated the concerned assets to the Institute, subject to the approval of the Minister of the Environment after the resolution of three-fourths or more of the current number of members of the Board of Directors and three-fourths or more of the current number of members of the Board of Trustees.

Chapter 11 Supplementary Provisions

(Commission)

Article 52

In addition to matters stipulated in these Articles of Association, necessary matters relating to the operations of the Institute shall be decided separately by the Chair subject to resolution of the Board of Directors.

Additional provisions

1. These Articles of Association become effective on March 31, 1998.
2. Clause 2 of Article 18 shall become effective on and after March 31, 1999.
3. The President of the Institute shall serve as the Chair of the Board of Directors, until the first meeting of the Board of Directors of the Institution, which is to be held after

March 31, 1998.

4. Notwithstanding the provisions set forth in clause 7 of Article 18, the position of Managing Director may be vacant until an appropriate date.
5. Regardless of the provisions set forth in clause 5 of Article 43, terms of the Research Advisors selected by the Chair of the Board of Directors shall end on March 31, 1999. This is also in accordance with clause 3 of the same Article.

IGES Annual Report FY2001

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