

FY 2010 Business Report Institute for Global Environmental Strategies

The Integrative Strategic Research Programme (ISRP) for the Fifth Phase began in April 2010, and IGES strategic research by the research groups was categorised into 1) Issue cluster (important research topics on environmental issues), 2) Discipline cluster (analytical methodology) and 3) Stakeholder cluster. As such, each area of research was clarified according to these clusters and there was a strengthening of cross-cutting collaboration among the groups. The Issue cluster aims to meet the needs of Asia and the Pacific in each of the fields of research conducted by the groups. The Discipline cluster uses the results of economic analysis and research on governance carried out by each group and strives to improve the quality of policy research. The Stakeholder cluster works to strengthen the function of satellite offices and in particular the Kitakyushu office, which was renamed the Kitakyushu Urban Centre, and which conducted research focusing on urban issues. IGES signed Agreements with the UN Environment Programme (UNEP), the Asian Development Bank (ADB) and the Secretariat of the Convention on Biological Diversity (CBD), and made further studies on practical cooperative activities that make use of international networks. Moreover, in October, IGES gave support to the 10th Meeting of the Conference of the Parties to the Convention on Biological Diversity (COP10) held in Nagoya. IGES also contributed to the formulation of frameworks as part of international policy processes, such as launching the Asia Pacific Adaptation Network and the Asian Co-benefits Partnership.

In July, the second International Forum for Sustainable Asia and the Pacific (ISAP) was held on a bigger scale than previously, and provided a forum for discussion on sustainability and low-carbon development, from various viewpoints including climate change. The IGES Third White Paper was also published, on the theme of Sustainable Consumption and Production.

This year there was a peer review of ISRP4 which was completed in FY2009. Following the review, an internal meeting of senior staff was organised to discuss the result of the peer review, aiming to integrate in ISRP5 what was learnt through implementation of the Fourth Phase research.

As well as the above, IGES introduced a new time management system in July, and there was a trial run of the performance-based salary system in October. Successive work was implemented necessary for the transition to a public-interest corporation, in line with the new public-interest corporation system, and preparation was carried out towards the conversion of the Bangkok office into a local corporation.

I. Strategic Research

1. Issue Cluster

1-1 Climate Change Group (CC)

The goal of the Climate Change Group is to strengthen the knowledge base for climate change-related governance in Asia. In FY2010, the first year of the Fifth Phase, the group aims to conduct action-oriented research on the six components listed below.

Component 1: Low-Carbon Sustainable Development in Asia*

This component aims to determine which domestic institutions, leapfrogging mechanisms and traditional values and practices can promote low-carbon development in Asia. Main activities in FY2010: Analysis of climate policy in Indonesia, China and India. In particular, those focusing on this component conducted research on the policy making process, and comparability of commitments.

<Major research activities, outcomes and impacts in FY2010>

- Preparation of three working papers
- Policy dialogue with Chinese stakeholders (January 2011, Beijing) and with Indian stakeholders (February 2011, Delhi)
- Presentation at workshops during COP16 (December, Cancun/Mexico)
- Field study of climate policy and MRV systems in Indonesia

Component 2: Post-2012 Climate Regime*

With a view to making timely and pragmatic policy recommendations as to the post-2012 regime discussion, this component conducted the following activities in FY2010: Several researchers of the CC group joined the Japanese delegation. The group also prepared the Negotiation Handbook which contains valuable information for the policy makers and negotiators. IGES formed the IGES working group to discuss major negotiation issues with researchers and policy-makers in Japan.

<Major research activities, outcomes and impacts in FY2010>

- Published a handbook for the Japanese negotiators.
- Published working papers for the major issues in the negotiation
- Formally participated in the Japanese government delegates

Component 3: Institutional Design of an MRV (Measurement, Reporting and Verification) System

This component aims to understand the negotiating positions of different countries on an MRV system, and identify how an MRV system could be implemented in Asian developing countries (including possible synergies with GHG inventories). In FY2010, basic discussion points were sorted out with regard to designing an effective MRV system. In addition, MRV systems in various countries, specifically those in China and India, were analysed.

<Major research activities, outcomes and impacts in FY2010>

- Prepared a report (both in English and Japanese) in collaboration with seven experts- including policy makers- in Japan, compiling comprehensive analysis of the MRV issues; presented the report at international conferences (e.g. on the occasion of COP16).
- Field study on climate policy and related MRV systems in Indonesia, the USA, China and India.

Component 4: A Co-benefit Approach in Asia

This component aims to identify policies and measures that can maximise the developmental co-benefits from GHG mitigation in key sectors. In FY2010, the group contributed to the formation of an international network (Co-benefit forum). This research was conducted in collaboration with the Kansai Research Centre.

<Major research activities, outcomes and impacts in FY2010>

- Preparation of a manual on co-benefits in the field of transportation
- Established the secretariat of the “International Co-benefit Forum”
- Inaugurated a study to establish a project entitled “Co-benefit and gender” in collaboration with ADB.

Component 5: International Research Network for Low Carbon Societies (LCS-RNet)

This component aims to support the International Research Network for Low Carbon Societies (LCS-RNet) as a platform to promote information exchange and research cooperation on LCS. In FY2010, expansion of the network through various workshops and meetings was promoted.

<Major research activities, outcomes and impacts in FY2010>

- Published group newsletter focusing on climate issues as an attempt to actively disseminate information from Japan
- Established a database of climate policies in major countries

Component 6: Impacts of carbon constraints on business activities <New>

This component aims to analyse both qualitatively and quantitatively the impacts of the carbon constraints generated by emission trading schemes, carbon taxes, etc. on the economic activities of the private companies. The group provided international and domestic communities with information on the exact impacts to the various stakeholders in Japan.

<Major research activities, outcomes and impacts in FY2010>

- Published a consolidated report about the analysis of the carbon constraints on business by top investment analysts in each major industry in Japan.

- Quantitative analysis of impacts and mitigation measures by using econometric data from the Japanese steel sector.

1-1-1 Market Mechanisms Sub-Group

Component 1: Effective Market Mechanisms for Developing Countries in Asia

This component conducted a range of activities described below aiming at further facilitation of GHG reduction/removal projects leading to sustainable development in developing countries through market-based mechanisms, such as Kyoto Mechanisms (including CDM) established under the UNFCCC.

<Major research activities, outcomes and impacts in FY2010>

- CDM capacity building workshops in seven Asian countries (such as Cambodia, China, India, Indonesia, Lao PDR, Philippines and Thailand) associated with supporting CDM project development
- Collaborative research with governments and research institutes (in the aforementioned seven Asian countries) towards promotion of market mechanisms
- Construction and maintenance of the CDM/JI database, leading to regular data exchange with the UNFCCC secretariat for collaborative data analysis
- A series of policy papers based on the in-house database, and inputs for the CDM Executive Board
- Analysis reports and proposals for market-based mechanisms under the post-2012 international regime, and policy papers for CDM reform

1-2 Natural Resources Management Group (NRM)

The NRM Group was formed at the beginning of IGES' Fifth Phase to bring together the Forest Conservation, Freshwater, Adaptation, and Payment for Ecosystem Services divisions. The group aims to take advantage of the obvious synergies between the divisions to utilise their relative strengths in adopting a more comprehensive approach to its research. One outcome of this approach is research that the group is conducting under the IGES Strategy Fund on water scarcity and adaptation.

Component 1: Payment for Ecosystem Services

This component aims to collect, analyse and evaluate examples of payment for biodiversity services, to make inputs into TEEB: The Economics of Ecosystems and Biodiversity, and to formulate an innovative and biodiverse economic system to be applied internationally, through international conventions such as the Convention on Biological Diversity (CBD). In practical terms, research is carried out with three objectives in mind: i) to collect, analyse and evaluate examples of payment for biodiversity services in Japan; ii) to identify policy measures including economic instruments to promote sustainable biodiversity conservation, and iii) to clarify the cooperation mechanisms for biodiversity conservation in the use of economic instruments, mainly in the CBD process. In the implementation process for this component, support was given to the Secretariat for the CBD and to MOEJ at COP10. The research will be conducted in collaboration with the Economy and Environment Group and JISE.

(1) Baseline Study of Biodiversity Situation, its Evaluation of Ecosystem Services to Utilise Economic Instruments and its Governance in Japan and Asia and the Pacific

The study was conducted in Component 3 of the Economy and Environment Group (EE). In-depth study was conducted on payment for biodiversity services in Japan. As the second year of research in a three-year plan, studies were carried out to collect and analyse actual examples of payment in Japan of forest environment tax, water source environment tax, and subsidies for rice paddies. Evaluation was then carried out on the rationality and policy effect of these payments for biodiversity services in Japan.

<Major research activities, outcomes and impacts in FY2010>

- Made inputs into the TEEB (The Economics of Ecosystems and Biodiversity) Report on examples of payment for biodiversity services in Japan
- Organised the TEEB and Green Economy Symposium to announce the Japanese examples of the above (August, Nagoya University)
- Presented research results at the Society for Environmental Economics and Policy Studies (September,

Nagoya)

- Presented research results at the TEEB side event held during COP10 (Conference of the Parties to the Convention on Biological Diversity) (October, Nagoya)
- Provided outreach support within Japan for the TEEB Final Report

Component 2: Climate Change Adaptation

The goal of this component is to strengthen the knowledge for promoting science-based adaptation in the Asia-Pacific region. In FY2010, the first year of the Fifth Phase, the component conducted result-oriented research on the sub-components listed below.

(1) Adaptation Metrics

This component aims to measure the effectiveness of adaptation actions, identify barriers to mainstreaming climate change adaptation in development, develop guidelines for mainstreaming adaptation in sectoral and national policies and actions, measure progress in mainstreaming adaptation in sectoral and national policies, and characterise and identify enabling conditions for adaptive policies. In FY2010, the group conducted regional stakeholder consultation on Adaptation Metrics and Policy Frameworks for Adaptation Governance in the Gangetic Basin. The consultation has sensitised various stakeholders to the need for establishing a framework for measuring adaptation, which helped promote understanding of issues in the existing decision-making mechanisms.

<Major activities, outcomes and impacts in FY2010>

- Organised a stakeholder meeting (March 2011, Bangladesh) as well as a session on frameworks for measuring adaptation, 5th International Conference on Community Based Adaptation (March 2011, Bangladesh)
- Published six articles in peer review journals
- Invited as a contributing author for the 5th Assessment Report of IPCC
- Invited as a guest editor of 'Asian Journal of Environment and Disaster Management' for editing a special volume on Climate Change Adaptation: Perspectives in the Asia Pacific'.

(2) Identification of Win-Win Solutions (Adaptation policies and actions)

This sub-component aims to develop a decision-making framework for identification of win-win adaptation actions in Asia-Pacific region. The regional stakeholder consultation on Adaptation Metrics and Policy Frameworks for Adaptation Governance and the regional consultation mentioned above (1) raised issues in the existing decision-making mechanisms and helped them in identifying the way forward.

<Major activities, outcomes and impacts in FY2010>

- Literature review for identifying processes and methods for prioritising adaptation actions
- Conducted reconnaissance/scoping studies on risk insurance in various Asia-Pacific countries
- Published book chapters, peer journal articles, and proceedings on analyses of adaptation policies.

(3) Asia Pacific Climate Change Adaptation Network

This component consists of capacity building for enhancing adaptation to climate change in the most vulnerable sectors of the Asia-Pacific region mainly through supporting the Asia-Pacific Adaptation Network (APAN). As a joint programme with the Asian Institute of Technology/UNEP Regional Resource Centre for Asia and the Pacific (AIT/UNEP RRC.AP), IGES is co-hosting the Regional Hub for a newly formed APAN. This component, in collaboration with the Bangkok Office, provided technical inputs to APAN activities and assists in coordination with Ministry of Environment Japan and other stakeholders in Japan.

<Major activities, outcomes and impacts in FY2010>

- Conducted two training needs assessment (TNA) workshops (January and February 2011) in collaboration with Bangkok Office - invited national partners in five countries to discuss the current state of training and capacity building initiatives and gaps for improvement .

Component 3: Forest Conservation through REDD+ and Forest Products Trade*

To contribute to the sustainable forest management, particularly in the Asia-Pacific region, research and activities under the following sub-components were conducted in FY2010.

(1) REDD+ Demonstration Activities

This sub-component consisted of (i) action research and workshops on community carbon accounting approaches (CCA) with local partners, and (ii) review and comparative analysis of selected REDD+ demonstration activities.

<Major research activities, outcomes and impacts in FY2010>

- Conducted action research in Papua New Guinea (Madang Province), Cambodia (Mondulhiri Province), and Indonesia (Central Java and South Sumatra Provinces).
- Conducted a workshop to build capacity on CCA in PNG (July), Cambodia (February 2011) and Indonesia (March 2011).
- Expanded the IGES REDD+ Online database: Total of 16 project profiles and two country studies.
- Published two reports and one academic paper.

(2) National REDD+ Readiness

This component aimed to contribute to national REDD+ readiness by providing an independent review of readiness activities in two countries and by facilitating stakeholder collaboration on REDD+ through national workshops.

<Major research activities, outcomes and impacts in FY2010>

- Conducted a national workshop on REDD+ readiness (February 2011, Papua New Guinea); 50 participants from government, international organisations, civil society, academia, etc.
- Published three reports.

(3) Forest Products Trade

This component focused on the response in Japan to the illegal logging issue and the role of Customs in combating the trade in illegal wood.

<Major research activities, outcomes and impacts in FY2010>

- Presented IGES Policy Brief #11 “*Customs collaboration to combat the international trade in illegal timber*” at Illegal Logging Update and Stakeholder Consultation meeting, Chatham House.
- Analysis on Japan for Chatham House report *Illegal logging and related trade. Indicators of the global response*
- Publicised the research results through domestic media (*ENECO*) in Japanese.

(4) Climate Change and Adaptation to Water Scarcity Project <FY2010 Strategy Fund Research>

This research aims to identify options to enhance the water scarcity resilience of rural communities through adaptation strategies that integrate water and land use management. Questionnaire survey and focused group discussions in four districts of Nepal were conducted.

(5) Others

- Conducted review of environmental impact assessment and biodiversity offsetting policies in Germany, US and Australia as part of a commissioned study for the Ministry of Environment.
- Two case studies on APFED Gold Award projects in Nepal and in India
- Microfinance and Adaptation Project: Survey on microfinance institutions and their clients in Nepal; results presented at Microfinance Summit Nepal 2010 <FY2009 Strategy Fund Research>

1-2-1 Freshwater Sub-Group

The goal of the Freshwater Sub-Group is to enhance water governance for sustainable development. These sub-group activities are composed of two components: research entitled “Groundwater Governance for Sustainable Development” and a non-research activity “Water Environment Partnership in Asia (WEPA)”. In

FY2010, the first year of the Fifth Phase, the group conducted the following activities to establish the basis of the groundwater research and to enhance human and institutional network.

Component 1: Groundwater Governance for Sustainable Development*

Two sub-components were planned, namely (i) Baseline Study of groundwater and its governance in Asia and (ii) In-depth study on enabling environment for introduction/effective implementation of economic instruments for sustainable development. However, the second component could not be implemented in FY2010 due to budget and human resource constraints. This component is conducted as an integral part of the activities related to the Asia-Pacific Water Forum Water Knowledge Hub Network on Groundwater. In the FY2010, the following actions were taken to establish the basis of the research and the sound network with hub partner institutes:

<Major research activities, outcomes and impacts in FY2010>

- A planning meeting for the Asia-Pacific Water KnowledgeHub for Groundwater Management (under ISAP)
- Survey on arsenic problems and policy responses to it in Cambodia and draft policy brief preparation on the survey
- Water resources situation analysis of Mewat District, Hariyana, India (case study in collaboration with TERI University)
- Participation in the KnowledgeHub Learning Week organised by ADB
- Preparation of author's guideline of Groundwater KnowledgeHub Policy Brief

Component 2: Water Environment Partnership in Asia (WEPA)

The freshwater sub-group has been serving as the secretariat of the Water Environment Partnership in Asia (WEPA) commissioned by the Ministry of the Environment, Japan (MOEJ). The sub-group continues to provide the secretariat work for the partnership initiative among 13 Asian countries. With the aim to promote water environmental governance, the following activities were implemented in FY2010.

<Major research activities, outcomes and impacts in FY2010>

- WEPA Workshop on Climate Change Adaptation and WEPA Annual Meeting February, 2011, Tokyo), targeting government officials of WEPA countries
- Bilateral meeting in Nepal (December, Kathmandu)
- Questionnaire survey on wastewater management policies in WEPA countries and follow-up survey in Indonesia and Thailand (March 2011)
- Questionnaire survey on climate change and water environment (questionnaire on data availability; on perception of climate change impacts on water environment; and on water in climate change adaptation policies/strategies)
- WEPA database update (available on web-site)

1-3 Sustainable Consumption and Production Group (SCP)

The goal of the Sustainable Consumption and Production (SCP) Group is to contribute to the development of sustainable patterns of consumption and production in the Asia-Pacific region. Special attention is given to the use of materials (physical resources) and how the environmental impacts associated with those materials over their life-cycles can be reduced through policy interventions. In FY2010, the first year of the Fifth Phase, the group continued the work carried out by the Waste and Resources Project in the Fourth Phase while gradually establishing a new research focus on sustainable consumption in Asia. For that purpose, each component of the group conducted the following activities.

Component 1: Sustainable Consumption in Developing Asia

This component aims to explore the meaning of sustainable consumption in an Asian context, and how policies can address unsustainable patterns and trends. In FY2010, the component prioritised network building with potential partners, fundraising, and initial information collection and analysis. It also explored potential

collaboration with other IGES divisions (such as the Governance and Capacity Group).

<Major research activities, outcomes and impacts in FY2010>

- A chapter on the Asia and the Pacific region for UNEP's forthcoming report "Global Outlook on SCP Policies" (to be published in summer 2011)
- Preparation of a contract with ADB for a project on energy efficient housing policies in developing Asia (to be conducted in FY 2011 and 2012)
- A policy statement as the NGO major group representative in the high level segment of the 18th meeting of the Commission for Sustainable Development (CSD) (May, New York)
- A session on "Sustainable Consumption and Production (SCP) Policies and National Strategies" organised together with UNEP at the Asia Pacific Roundtable for SCP (APRSCP) (June, Colombo)

Component 2: Chemicals Management for Sustainable Product and Material Life-Cycles

This component aims to contribute to improved management of chemicals, especially chemicals used in products, from a life-cycle perspective. A special focus is the intersection between chemicals policies and policies on waste and recycling. The activities in FY2010 were as follows.

<Major research activities, outcomes and impacts in FY2010>

- Co-authored with the International Chemicals Secretariat a UNEP/Nordic Council publication on information systems on substances in electronics.
- A side-event at the CSD18 entitled "The Flow of Materials is also a Flow of Chemicals: lack of Information on Chemicals in Products is an Obstacle in achieving a Greener Economy" co-organised with the Government of Sweden and the United Nations Environment Programme (May, New York)
- Invited by UNEP to co-chair an international workshop and an expert consultation meeting on Chemicals in Products (December 2010 and March 2011, Geneva)
- A survey on stakeholder involvement in strategic chemicals management and Pollutant Release and Transfer Register (PRTR), commissioned by the MOEJ.
- A peer-reviewed article published in the academic journal *Waste Management* (The paper was also "Highlighted Article" in the publisher's newsletter.)

Component 3: Governance for Sustainable Resource Circulation in Asia

This component aims to assess policies related to resource circulation, including trade in second-hand goods and recyclable materials, from a sustainability perspective. In FY2010, the following activities were conducted partly in collaboration with the Economic and Environment Group of IGES.

<Major research activities, outcomes and impacts in FY2010>

- A peer-reviewed article published in the Japanese Journal *Material Cycles and Waste Management Research* (March 2011).
- A background report on policy tools for sustainable materials management as IGES' contribution to UNEP's report "Resource Efficiency: Economics and Outlook" jointly developed by the Commonwealth Scientific and Industrial Research Organisation (CSIRO), IGES, the Energy and Resources Institute (TERI) and The Chinese Academy of Sciences (CAS) (to be published in 2011)
- Coordinated the execution of a major commissioned research contract for MOEJ on Sustainable Resource Circulation in Asia, involving collaborators in China, Taiwan, the Philippines, Thailand, Viet Nam and Malaysia.
- Coordinated a joint Japan-Malaysia project on organic waste management. A progress report was prepared jointly by IGES and the Ministry of Housing and Local Government of Malaysia.
- Invited as a guest speaker and panelist for the 10-year anniversary event of Japan's Fundamental Law of Sound Material Cycle Society organised by MOEJ (January 2011, Tokyo), presenting on "Expected Role of Japan's Resource Circulation Policy under Globalized World"

Component 4: Sustainable Waste Management with Multiple Benefits

This component aims mainly to identify feasible options for local governments to realise the sustainability

benefits, of improved waste management. Such benefits include greenhouse gas emission reductions, renewable energy generation, income generation, and soil quality improvement.

<Major research activities, outcomes and impacts in FY2010>

- Draft versions of a decision tool and implementation guidelines for biomass waste utilisation for Cambodia, Lao PDR, and Thailand (to be completed in FY 2011)
- A policy report on improved organic waste management (to be published in summer 2011)
- Two peer-reviewed book chapters and one journal paper on sustainable solid waste management in developing Asia.
- Two presentations and a thematic session at the Regional Workshop of the Greater Mekong Sub-region to Share Lessons Learnt from the Viet Nam experience on the National Strategy of Integrated Solid Waste Management/3Rs (July, Hai Phon/Viet Nam)
- A report on the APFED Award Case Study on Coconut Based Agroforestry in Kerala, India

2. Disciplines Cluster

2-1 Economy and Environment Group (EE)

The goal of the Economy and Environment Group is to develop innovative quantitative analysis tools for integrated policy assessment of sustainable development, and thereby to conduct research on policies and strategies tackling emerging issues such as trade and environment and green development. In FY2010, the group implemented the following activities.

Component 1: Integrated Policy Impact Assessment for Sustainable Development

Employing the economic model built by the Economic Analysis Team in the Fourth Phase as a benchmark model, the group constructed integrated policy impact assessment models to evaluate the effects of resource constraint as well as sustainable use of ecosystem services. Additionally, the group is planning to apply bottom-up models for an impact assessment on low-carbon policies and other environmental policy issues. In this fiscal year, we engaged in capacity development regarding such models.

<Major research activities, outcomes and impacts in FY2010>

- Developed a single-country computable general equilibrium (CGE) model to evaluate sustainable use of ecosystem services
- Developed a multi-regional CGE model to assess constraint on iron ore supply
- Developed a CGE model for Japan to analyse consumption reduction policy for iron ore and to evaluate recycle policy for scrap iron
- Capacity development concerning bottom-up energy technology models (TIMES model and AIM-Enduse model) and publication of EE Technical Paper on AIM-Enduse model

Component 2: Trade and Environment with Special Focus on Embodied Emissions

The group improved the estimation method on embodied emissions developed in the Fourth Phase by the EA team. The group revised the estimation method to reveal the policy implications of burden-sharing relevant to embodied emissions and conducted a policy review on the border adjustment measures related to embodied emissions.

<Major research activities, outcomes and impacts in FY2010>

- Revising estimation method for embodied emissions using the Asia multi-regional input-output table.
- Produced one book chapter and two peer review articles on estimation of embodied emissions.
- Produced a policy report based on the review on the border adjustment for embodied emissions.

Component 3: Green Growth through Economic Instruments and Green Investment

Based on the progress of environmental economics studies which the EA team launched in the Fourth Phase, the EE group conducted policy analyses on resource circulation and sustainable use of ecosystem services using integrated policy impact assessment models in collaboration with the SCP group and the NRM group, as part of the Policy Study on Environmental Economics funded by MOEJ. Also, the group carried out an analysis on sustainable use of biofuel in collaboration with the GC group and the CC group. Moreover, the

group conducted a research on policies and activities regarding green economy and green growth of each country through the Rio+20 preparatory research project funded by MOEJ. Furthermore, the group performed an analysis on energy market intergration in East Asia on commission from the Economic Research Institute for ASEAN and East Asia (ERIA).

<Major research activities, outcomes and impacts in FY2010>

- IGES research result on energy market integration in East Asia, an ERIA commissioned work, mentioned in the statement at the East Asia Summit Energy Minister Meeting (July Dalat/Viet Nam)
- Presentation, at the TEEB side events during the CBD-COP10 in Nagoya, of some parts of the research results regarding the Policy Studies on Environmental Economics funded by MOEJ
- A statement at the OECD Green Growth Workshop (February 2011, Paris) in relation with the Rio+20 preparatory research project funded by MOEJ

2-2 Governance and Capacity Group (GC)

The goal of the Governance and Capacity Group is to explore ways to improve governance and capacity for sustainable development in the Asia-Pacific region, and propose appropriate policies. In FY2010, due to successful fundraising efforts, the scope of the research was expanded and somewhat re-organised under six main components. The following main activities will be implemented in each of these components.

Component 1: Regional Governance and Environmental Cooperation in Asia <New>

The main goals of this component are to analyse international environmental cooperation mechanisms in North and Southeast Asia to develop recommendations for strengthening them, and contribute to regional policy processes such as the Tripartite Environment Ministers Meeting (TEMM). This is commissioned work funded by MOEJ and implemented in cooperation with the PMO. Main activities in FY2010:

<Major research activities, outcomes and impacts in FY2010>

- Research on factors influencing ASEAN's decision-making process for environmental cooperation
- Survey of environmental cooperation strategies with ASEAN of selected non-ASEAN countries
- Survey of environmental cooperation frameworks outside of Asia and implications for development of a comprehensive environmental cooperation strategy in East Asia
- Research to develop a cooperation strategy in East Asia to promote green markets, focusing on environmental information (labelling, certification, and standards) and green public procurement
- Support MOEJ at TEMM and related meetings

Component 2: Multilevel Governance – IEG and IFSD <New>

The main goals of this component are to analyse the strengths and weaknesses of various reform options for International Environmental Governance/ Institutional Framework for Sustainable Development (IEG/IFSD) in order to make recommendations for improvement, and assist MOEJ in Rio+20 preparation activities, provide analysis of the stance of key countries and stakeholders, and make policy recommendations. This is commissioned work funded by MOEJ and implemented in cooperation with the PMO and other groups. The former component on participatory governance, whose main objective is to improve environmental management through increased public participation in environmental decision-making and sustainable development planning, is now incorporated under this component in order to more closely link it with Rio+20. "This sub-component was implemented in tandem with the PMO 4-4."

<Major research activities, outcomes and impacts in FY2010>

- Supported MOEJ at related intergovernmental meetings such as the Second Preparatory Committee and First Informal Intersessional Meetings for the United Nations Conference on Sustainable Development (UNCSD) (Rio2012), the UNEP 26th Session of the Governing Council/ Global Ministerial Environment Forum (GC/GMEF), and the Second Meeting of the UNEP Consultative Group of Ministers or High-level Representatives on International Environmental Governance (IEG), and made recommendations regarding the position paper of the Government of Japan at these meetings
- Attended Major Groups and Stakeholders Consultation on Green Economy and International Environmental Governance (October, Geneva) and made a presentation at the Stakeholder Forum (March

2011, New York)

- Conducted preliminary research on key issues for participatory environmental governance in the Asia Pacific region in cooperation with the PMO.
- Made recommendation to MOEJ that Japan should organise a national consultation process to prepare for Rio2012 with the participation of various stakeholders.

Component 3: Regional and National Governance: Trans-Boundary Air Pollution

The main goal of this component is to analyse the key trends of domestic atmospheric environment management policy in the case study countries in the North and South East Asian regions (China, Japan, Republic of Korea, and Thailand) and the main factors determining them in order to understand the possible domestic factors and barriers to the promotion of potential international coordination for comprehensive atmospheric management or potential international agreement in East Asia. FY2010 is the second year of the research project conducted in collaboration with Kanazawa University and other universities and research institutes. Main activities in FY2010:

<Major research activities, outcomes and impacts in FY2010>

- Conducted four country case studies (China, Japan, Republic of Korea, and Thailand)
- Organised and made presentations at the International Experts Workshop on International Framework and Co-benefits Approach to Promote Air Pollution Control in East Asia (January 2011, IGES HQ), and at Better Air Quality (November, Singapore).
- Conducted research on perceptions of transboundary air pollution issues in case study countries
- Two peer reviewed journal articles under revision on atmospheric environment management policies in China and Korea

Component 4: Capacity Development and Education for Sustainable Consumption in Asia

The main purpose of this component is to strengthen governments' efforts on Education for Sustainable Consumption (ESC) to promote civil society's proactive participation in sustainable consumption and responsible lifestyles. This will be accomplished through three objectives: i) capacity building for ESC leaders to strengthen policy-makers' understanding of ESC's importance and techniques for its promotion, ii) providing strategic policy recommendations on ESC to policy-makers in Northeast Asia (NEA), and iii) advancing policy dialogues on ESC in the NEA region to secure better regional cooperation. This component will be closely coordinated with SCP to contribute to a more comprehensive study on sustainable consumption in developing Asia. The followings are major activities in FY2010.

(1) Research on Capacity Development of ESC Leadership

Under this sub-component, the group conducted comparative study of the governmental capacity for effectively implementing ESC in North East Asia cooperating with research partners in China and Korea. The group organised a workshop on ESC in North East Asia in collaboration with ESC policy makers, practitioners and researchers. The workshop recommendations identified opportunities to narrow the gap between policy and implementation for ESC.

<Major research activities, outcomes and impacts in FY2010>

- Completed IGES Policy Report on capacity development for improved ESC implementation
- Organised a workshop "Asia Workshop on Education for Sustainable Consumption & Promoting Sustainable Lifestyles" (December, Beijing), in cooperation with Beijing Normal University and Center for Environmental Education and Communication of Ministry of Environmental Protection China.

(2) Advancing policy dialogues on ESC in the NEA region to secure better regional cooperation

As part of networking efforts to strengthen regional ESC practices, the group helped coordinate the Asia-Pacific Regional PERL Network (PERL = Partnership for Education and Research about Responsible Living).

<Major research activities, outcomes and impacts in FY2010>

- Supported the organisation of the East Asian Session at the PERL International conference (March 2011, Istanbul)
- Distributed Executive Summary of research findings and prepared Japanese Case-Study for PERL report (Progress in implementing Education for Sustainable Consumption) submission at UN Commission on Sustainable Development 18 (May, New York).
- Participated in Sustainable Lifestyle panel at Asia Pacific Roundtable on Sustainable Consumption and Production (9th APRSCP)(June, Colombo)

Component 5: Local Governance

The main objectives of this component are to analyse effective ways to promote regional intercity networks for sustainable cities and to promote practical measures to build low-carbon societies through regional intercity collaboration. This research will be conducted in cooperation with the Kitakyushu Urban Centre.

The possibility of international collaboration between Danang, Viet Nam and other cities in developing Asia, and Kitakyushu and other Japanese cities, using eco-point, is being investigated for the FY2011 research.

(1) International Intercity Network Programme for the Environment

<Major research activities, outcomes and impacts in FY2010>

- One peer reviewed article under review, one chapter in a book to be published by JICA (now in press). Published 1 IGES policy report, two IGES discussion papers, one commissioned report.
- Participated and made comments at International Workshops on Environmentally Friendly Cities (March 2011, Beijing and Shenyang), co-organised by Chinese Ministry of Environmental Protection and Japanese Ministry of the Environment.
- A chapter of the JICA book on climate change mitigation and international development (to be publicised on the occasion of COP17 in Durban, South Africa in November - December 2011)

(2) Japanese citizens' survey on attitude of climate change and international environmental collaboration

<Major research activities, outcomes and impacts in FY2010>

- Three peer reviewed articles published / accepted, one peer reviewed article under review. Published one IGES discussion papers, one commissioned report.
- Made three presentations in international meetings: Japan-Taiwan Bilateral Symposium on Environmental Science and Technology (September, Kitakyushu); Japan-Vietnam Joint Symposium on Sustainable Urban Environmental System (September, Danang/Viet Nam); EcoBalance 2010 (November, Tokyo).
- Made one presentation in a domestic workshop: Hosei University Low Carbon City Workshop (November, Tokyo).

Component 6: Biofuel Use Strategies for Sustainable Development* <Renumbered>

The main objective of this component is to promote sustainable production and utilisation of biofuels by developing win-win-win strategies and options to achieve energy security, environmental conservation and poverty reduction. FY2010 was the last year of the three-year project that started in FY2008 conducted in collaboration with University of Tokyo and other research institutes.

<Major research activities, outcomes and impacts in FY2010>

- Conducted four country-level case studies (China, Indonesia, Japan and India), a regional-level study, and an economic modeling study (Research on India and the economic modeling study were conducted by the Economy and Environment Group)
- Presented results at other meetings such as Society for Environmental Economics and Policy Studies (SEEPS) Annual Conference (September, Nagoya), Conference of the Institute of Life Cycle Assessment (October, Tokyo), and The 7th Biomass-Asia Workshop (November, Jakarta)
- Presented the research results through publication of several reports and book chapters

- Contributed to the Roundtable on Sustainable Biofuels (RSB)¹, and to the “ERIA (Economic Research Institute for ASEAN and East Asia) Working Group on Sustainable Biomass Utilisation in East Asia.”

3. Stakeholder Cluster

3-1 Kansai Research Centre (Business and the Environment)

The Kansai Research Centre had been conducting research focusing on actions taken by the private sector including business corporations promoting environmental and energy-saving measures. Corporate behaviors were analysed in collaboration with case study countries and local governments, while environmental and energy-saving technologies of firms were studied aiming to apply their low-carbon and co-benefit technologies to developing countries. By conducting these activities, the research aimed to identify possible barriers and promotional factors to promote sustainable business in Asia, and formulate specific strategies. The following activities were conducted in FY2010.

Component 1: Research for the Application of Low-Carbon Technology in India

To promote the application of low-carbon technology in India, IGES worked with The Energy and Resources Institute (TERI) and conducted a wide range of activities: selecting appropriate low-carbon technologies for the reduction of GHG; capacity building of local engineers; building infrastructure for technology information sharing, and developing a framework of cooperation among relevant businesses. Promising and appropriate Japanese technologies were identified in consideration of the needs of GHG reduction technology and its business prospects, potential barriers and success factors for applying those technologies, as well as trends in demand and supply of electricity in the country. At the same time, pilot projects were conducted to demonstrate feasibility and provided training opportunities to locals in the form of practical research, aiming to promote application of low-carbon technologies in developing countries. The research focuses on the application of energy efficient/new energy technologies to small to medium-sized businesses (including factories and commercial buildings) with the cooperation of the private sector in the Kansai area.

<Major research activities, outcomes and impacts in FY2010>

- Overlooked needs of low-carbon technologies: identification of potentials of Japanese low-carbon technologies and prioritisation of the potential low-carbon technologies to be applied in India
- Published one research report and one working report
- Organised an international symposium to disseminate findings to Japanese policy-makers, researchers, citizens, etc. in collaboration with TERI, etc.

Component 2: Market-based Measures for Improving Private Sectors' Carbon Performance in Northeast Asia

Focusing on climate change policies using economic instruments (subsidy, taxation, emissions trading, etc.), this component aimed to identify the existing gap between current policies and effective and feasible policies in Northeast Asia and analysed the influences of those policies on individual companies: (i) influence on energy efficiency and GHG emissions of the companies, and (ii) influence on economic performances of the companies and their corresponding responses. On that basis, policy recommendations were provided as a comprehensive policy mix as well as implementable measures in cooperation with local research partners. The results from the above mentioned research were expected to support the discussions at related policy platform like the Tripartite Environment Ministers Meeting among Japan, China and Republic of Korea (TEMM), etc. The timely publications and outreach of intermediate research results of policy overviews and questionnaire surveys helped the stakeholders clearly understand the latest progress of the project.

<Major research activities, outcomes and impacts in FY2010>

- Overlooked policies on industrial energy efficiency and carbon mitigation in the three target countries, and questionnaire surveys on company's energy saving practices in China and Republic of Korea
- Three overview reports individually summarising policy progresses of industrial energy efficiencies in

¹ A global multi-stakeholder initiative to develop sustainability standards

the three countries

- Two peer-review articles with one published in an international academic journal *Energy Policy* and another under review
- Presentations at international conferences including “the 11th Global Conference of Environmental Taxation” (November, Bangkok) and the special symposium of “Global South-South Development Expo 2010” (November, Geneva) by UNDP as an invited speaker

Component 3: Local Business Initiative

The follow-up activities of “Uchi-eco Diagnosis Project”, such as providing know-how, had been implemented to disseminate it nationwide in cooperation with local governments and related private sectors. Additionally, other research had been conducted to explore the possibilities of trading mechanisms for emissions reduction between small to medium-sized businesses and large-scale companies. This research included the “CO₂ reduction cooperative project” which studied CO₂ reduction measures etc. in cooperation with private companies (Kansai Electric Power Company and Osaka Gas, etc.) to develop relevant solution-oriented policies and project schemes, implement the energy-saving diagnosis, as well as to implement action researches.

Additionally, Japan Center for Climate Change Actions (JCCCA) implemented the “Uchi-eco Diagnosis” project at 22 of the 51 centres, and diagnosed about 1,800 cases. Moreover, the “CO₂ reduction cooperative project” project scheme which IGES had provided had been reflected in the measure of Hyogo Prefectural government.

<Major research activities, outcomes and impacts in FY2010>

- Adoption of the know-how of “Uchi-eco Diagnosis” by Japanese government to be included in the new national growth strategy, “Environmental concierge system “
- The Uchi-eco Diagnosis project officially systematised as a CO₂ reduction measure in Hyogo prefectural government and some local governments etc.
- Received an incentive prize from the Japan Society of Energy and Resources of its paper.
- Implemented the simplified diagnosis of energy-saving, proposed strategies for the specified small to medium-sized businesses, and established the basement toward building the new structure

Component 4: Co-benefit Technologies Platform

The “Committee of Co-benefit Technologies” was launched with the participation of those from academia and industry to collect and organise technological information and data regarding co-benefits technologies aiming to synergize Japan’s environmental measures and those dealing with global warming. The research was conducted on applicable technologies and their transfer to developing countries in collaboration with the Ministry of the Environment, Japan (MOEJ). To implement this, internal collaboration was made with the Climate Change Group, which is responsible for institutional and economic aspects of the co-benefit approach.

<Major research activities, outcomes and impacts in FY2010>

- Reviewed measures and technological information related to Co-benefit approach
- Conducted the co-benefit project promotion by implementing joint research with government officials in Asian countries
- Inputted the measure/technological map and quantitative evaluation tool regarding the co-benefit approach toward officials at “Better Air Quality (BAQ)” (November, Singapore) etc.

Component 5: Dissemination

Kansai Research Centre disseminated the results of its research activities periodically to policy authorities and industrial sectors, and implemented the following activities to obtain feedback from them in FY2010

<Major research activities, outcomes and impacts in FY2010>

- Symposium -“Climate Change and Environmental Management on Coastal Seas” (October, Kobe)

The symposium was held to discuss regarding the adaptation measures for climate change related to the environmental management on costal seas. It was jointly held with Hyogo prefectural government,

Emecs Center, and the APN centre. (135 participants)

- International Symposium "Role of Corporate Environmental Information Disclosure to Promote Sustainable Production" (November, Kobe)

The latest trends in corporate environmental information disclosure (CEID) in the US, Europe and selected Asian countries were introduced through presentations from internationally renowned experts and had discussions with audience. The symposium was jointly held with Hyogo Prefectural government, Kobe University, and EU Institute Kansai. (100 participants)

- International Symposium "Research Partnership for the Application of Low Carbon Technology for Sustainable Development" (Kobe, March, 2011)

This symposium introduced the purposes and objects of the present research through discussion among researchers from Kyoto University and The Energy and Resources Institute (TERI) and relevant experts. The symposium was jointly held with Hyogo prefectural government and TERI. (130 participants)

3-2 Kitakyushu Urban Centre

The objective of KUC is to contribute to the bottom-up sustainable development in the region by focusing on the local level policy research and activities including the research on effective policies for low-carbon and sustainable cities, support for actual implementation of related projects, promotion of inter-city cooperation, and dissemination of these information. In FY2010, as the first year of the Fifth Phase, four research components were carried out and the following outputs and impacts were achieved.

Component 1: Organisation of the 2nd High Level Seminar on Environmentally Sustainable Cities and its follow up

As an activity of the Clean Asia Initiative of Ministry of the Environment Japan (MOEJ), the 1st High Level Seminar on Environmentally Sustainable Cities (HLS ESC) was held in Jakarta, Indonesia, in March 2010 under the framework of the East Asia Summit Environment Ministers Meeting (EAS EMM). As the secretariat of the seminar, IGES undertook follow up activities in FY2010 to realise the five practical recommendations given in the Chair's Summary.

<Major research activities, outcomes and impacts in FY2010>

- Presented the outcome of the 1st High Level Seminar on Environmentally Sustainable Cities (HLS ESC) at the 2nd East Asia Summit Environmental Ministers Meeting (EAS EMM) (October, Brunei Darussalam): endorsement for organising the 2nd HLS ESC
- Held the 2nd HLS ESC (March 2011, Kitakyushu) with participation of more than 140 participants including the delegates from 12 EAS EMM member countries, 19 cities and 18 organisations
- Approval of the Model Cities Programme, one of the recommended activities of the 1st ESC HLS, by the Japan-ASEAN Integration Fund (JAIF) (to be implemented in ASEAN member states in FY2011)

Component 2: Research on low-carbon development in Asian cities through inter-city cooperation

Research on effective local low-carbon policies and transfer to Asian cities has been carried out using the Environment Research & Technology Development Fund (ERTDF) for two years which will be concluded in FY2011. In parallel, a collection of low-carbon policies and measures of Japanese local governments was compiled and a new JICA training course on low-carbon cities was developed.

<Major research activities, outcomes and impacts in FY2010>

- Held an International Workshop (March 2011, Kitakyushu) under the framework of the Study on Low-carbon Development in Asian Developing Countries through International Intercity Collaboration (FY2009-2011) funded by the ERTDF of MOEJ in cooperation with Kyushu University.
- Studied the inter-city platform for low-carbon development and presented its outcome at the Low-Carbon City Forum (November, Tokyo)
- Applied for the ERTDF on Designing District Groups and Social Mounting Process in Achieving a Low Carbon Society in cooperation with Nagoya University and others (accepted and to be implemented for three years from FY2011)
- Compiled a collection of Japanese cities' effective low-carbon policies in three areas, including urban

- planning, energy management and resource circulation, in a booklet.
- Developed a Low-Carbon Cities Training Course in cooperation with JICA Kyushu and Kitakyushu International Techno-cooperative Association (KITA) (to be implemented from FY2011)

Component 3: Research on effective local initiatives to promote sustainable development

Following the past achievements under the Kitakyushu Initiative, a successful solid waste management model focusing on organic waste composting developed in Surabaya City, Indonesia, was promoted for replication in other Asian cities in collaboration with other relevant organisations. Notably, main activities are not only focusing on local solid waste management activities but also shifting to provision of support for developing a national strategy on organic waste management, particularly in Indonesia and Malaysia, respectively.

<Major research activities, outcomes and impacts in FY2010>

- Organised a workshop to formulate a national road map for organic waste management and composting in Indonesia (October 2011, Kitakyushu) with participation of delegates from five national ministries and five cities of Indonesia with the financial support from ESCAP; and initiated a project for formulating an organic waste management strategy in Malaysia with financial support by MOEJ (to be continued in FY2011).
- Assisted Cebu City, the Philippines and Sibu City, Malaysia for developing organic waste management strategy through composting programme in cooperation with Kitakyushu City and KITA (programme in Cebu City will continue in FY2011).
- Carried out a study in identifying the challenges and possibilities in establishing a sound material-cycle society in Sri Lanka with financial assistance from Kitakyushu City and Meijo University (as a result, integrated solid waste management plan was prepared for Kurunegala City)
- Lectured at a composting and environmental education training programme for pre-trained Japan Overseas Cooperation Volunteers (JOCV) and organised a follow-up TV seminar for JOCV in 8 Asian/African and Pacific countries with JICA Kyushu (March 2011).
- Published a peer-reviewed article, a newsletter article, two commissioned reports, and a workshop report.

Component 4: Joint activities with Kitakyushu City and local partners

As a member of Kitakyushu Asian Centre for Low Carbon Society, KUC has participated in various study group meetings and provided inputs and assisted preparing some project proposals to transfer low-carbon policies, measures and technologies to Asian cities in cooperation with Kitakyushu City and KITA. Cooperative relationships with other relevant local partners are also being developed.

<Major research activities, outcomes and impacts in FY2010>

- Attended various study group meetings organised by Kitakyushu City, including Asian Low Carbon Committee, Regional Cooperation for GHG reduction, and Promotion of Asian Standard Business (city-level MRV projects to be implemented from FY2011)
- Lectured at JICA solid waste management and wastewater management training courses with KITA.
- Lectured at an International Leader Training Programme of University of Kitakyushu
- Joined an environmental working group of Fukuoka Prefecture and Institute of Developing Economies - Japan External Trade Organization (IDE-JETRO) and contributed to the publication by writing a chapter on “Environmental cooperation by local governments and business promotion in Asia”
- Jointly published “The Development of Environmental Policy in China” with the International Centre for the Study of East Asian Development (ICSEAD) contributing a chapter on “Japan-China Environmental Cooperation”

3-3 Bangkok Office

The goal of the Bangkok Office is to build and strengthen IGES relationships with international organisations, especially those with regional offices in Bangkok. In FY2010, the first year of the Fifth Phase, the Office managed three main networks that IGES is providing secretariat services for and conducted various region-wide activities that each network planned.

Component 1: Network for Integrated Planning and Sustainable Development Strategies in Asia-Pacific Region (SDplanNet-Asia&Pacific)

IGES has been contracted by the International Institute for Sustainable Development (IISD) to coordinate this network through its office in Bangkok since July 2008 (three years) to help development planners to share innovative approaches for integrating sustainable development into plans, strategies and budgeting processes. FY2010 was the final year of the contracted period of operation under the current form of assistance and management. Bi-weekly newsletters and online training introduced to up-to-date tools and techniques useful for promoting sustainable development to the network members over most countries in Asia.

<Major activities, outcomes and impacts in FY2010>

- Published bi-weekly newsletters, managed the website and online learning training, held annual conference (October, Bangkok), and formed a Thai national chapter.

Component 2: Support for Asian Environmental Compliance and Enforcement Network (AECEN)²

AECEN operates primarily by twinning countries through South-South cooperation to share good practices on environmental compliance and enforcement and to assist each other in capacity building with the support from USAID. IGES was involved in the network and completed two twinning projects (energy efficiency between Japan and China and soil contamination between Japan and Thailand). Those projects facilitated capacity development through hands-on exercise and created impacts in government officials in charge in recipient countries. IGES Bangkok Office was selected as the permanent secretariat for AECEN at its annual conference in Singapore in 2009. IGES will start operating as the AECEN Secretariat in 2012.

<Major activities, outcomes and impacts in FY2010>

- Preparation for the transition to IGES as Secretariat, registered MOEJ as official representative of Japan
- Organised an annual Forum as well as steering committee (November, Kyoto).

Component 3: Asia Pacific Adaptation Network (APAN)³ <New>

Since the year 2010, IGES has been co-hosting the Regional Hub for APAN, a joint programme of UNEP, with the Asian Institute of Technology-UNEP Regional Resource Centre for Asia and the Pacific (AIT-UNEP RRC.AP) in Bangkok with the support from MOEJ, ADB, APN, and SENSEA (Swedish Environmental Secretariat in Asia). APAN aims to help build climate resilience of vulnerable human systems, ecosystems and economies through the mobilisation of knowledge and technologies to support adaptation capacity building, policy-setting, planning and practices. Adaptation Forum, regional/national meetings facilitated knowledge sharing among policy makers and practitioners. Regional workshops on training needs assessment contributed to capacity development of the government officials in charge through in-depth discussions of training module development.

<Major activities, outcomes and impacts in FY2010>

- Co-organised Adaptation Forum with Climate Change Adaptation Platform (October, Bangkok), co-organised national meetings with the Mongolian Development Institute (MDI) (June 2010 and January 2011, Ulaanbaatar) and a regional meeting with the Regional Environmental Centre for Central Asia (CAREC) as a side-event at MCED6 (September, Astana)
- Conducted regional workshops on training needs assessment with close collaboration with Adaptation team of the Natural Resources Management Group (January and February 2011, Bangkok), and held a steering committee (March 2011, Bangkok).

Component 4: Support for IGES' Activities in Bangkok and Coordination with UN Organisations Stationed in Bangkok

The Bangkok Office has maintained close collaboration with international organisations and research institutes located in Bangkok and other cities in Southeast Asia to provide a wide range of support to the

² AECEN is a network of 19 environmental agencies from 16 countries in Asia dedicated to improving performance in relation to compliance and enforcement of national laws and multilateral environment agreements. AECEN is also strengthening the capacity of environmental courts and the judiciary responsible for environmental cases throughout Asia.

³ The network collaborates with the Climate Change Adaptation Platform being funded by SIDA/SENSEA and implemented by UNEP and the Stockholm Environment Institute (SEI).

activities of IGES research projects. The Bangkok office also helps to identify project opportunities being developed by funding agencies located in Bangkok and provides strategic advice on marketing IGES services. In FY2010, various preparation efforts were made to incorporate the office as “the IGES Regional Centre” in FY2011.

<Major activities, outcomes and impacts in FY2010>

- Provided assistance in finalising MOU with UNEP (December) : discussions on potential collaboration with stakeholders in Bangkok
- Obtained an increase in financial support for AECEN from ADB, and opportunities of taking a substantial role in and funding for UNEP’s 5th Global Environmental Outlook (GEO5) preparation

Component 5: Application of eco-efficiency as a strategic policy tool towards green growth for the rice industry in ASEAN countries <FY2010 Strategy Fund Research>

The Bangkok office collected data (from Indonesia, the Philippines, Lao PDR, and Thailand) which will be used for computing the environmental and economic impacts in the rice industry, from "field to plate", based on Life Cycle Assessment and Life Cycle Costing methodologies, that provide a quantitative assessment of eco-efficiency in the industry. In-country interviews, in conjunction with literature reviews and some quantitative analysis, have provided a practical picture of the overall rice industry. The results are now being prepared for publication.

3-4 Beijing Office

The purpose of the Beijing Office is to act as an important bridge and the platform between China and Japan to further promote environmental bilateral cooperation between the two countries. In FY2010, which was the first year of the Fifth Phase, the Beijing Office aimed to work on the projects which are continued from the Fourth Phase so as to make sure that the expected results can be obtained. The Beijing Office also aims to function as an important bridge and the platform, which can be relied upon by both Japan and China. For these purposes, the following activities were handled by the Beijing Office in FY2010.

Component 1: Sino-Japan Water Environment Partnership

The Beijing Office has acted as the implementing organisation on the Japan side for “Sino-Japan Cooperation Model Project in the Field of Decentralised Wastewater Treatment” (Model Project) since FY2008.

<Major research activities, outcomes and impacts in FY2010>

- Research on sustainable measures to reduce pollutants, utilising the model facility of decentralised sewage treatment equipments constructed in FY2008 and FY2009
- Demonstration study of decentralised sewage treatment equipments in two places (one site in Haerbin city Heilongjiang province, one site in Zhangjiakou city Hebei province)
- “Japan-China Seminar on the exchange of the experience of ”Sino-Japan Cooperation Model Project in the Field of Decentralised Wastewater Treatment in Rural Area”(Taizhou city Jiangsu province, July)

Component 2: Sino-Japan CDM Capacity Building Project in China

This research was carried out in close coordination with the Climate Change Group (Market Mechanism sub-group).

Component 3: Participation in Sino-Japan Joint Survey Research in the Environment Field

IGES participated in joint survey research in the environment field conducted by the Japanese government in order to establish a strategic reciprocity relationship between China and Japan.

<Major research activities, outcomes and impacts in FY2010>

- Participated in joint survey research activities such as on co-benefit cooperation, total emission reduction of nitrogen and phosphorus in waste water, and total emission reduction of nitrogen oxide in waste air; contributions to policy recommendations

Component 4: Support for IGES’s Activities to be carried out in China

<Major research activities, outcomes and impacts in FY2010>

- Beijing Office supported other IGES activities in China by consulting and providing key information etc.

4. Programme Management Office (PMO): Networking and Strategic Operation

As it did in the Fourth Phase, the PMO worked on cross-cutting issues, being actively involved in a number of political initiatives in the Asia-Pacific region as well as worldwide. The actual operations were implemented in close collaboration with other research groups of IGES. PMO also designed and coordinated IGES-wide strategic activities including ISAP, White Paper, IGES Strategic Fund, external fundraising and promotion of internal quality management system to produce better quality research outputs.

4-1 International Forum for Sustainable Asia and the Pacific (ISAP)

International Forum for Sustainable Asia and the Pacific (ISAP) aims to promote diverse discussions on sustainable development in Asia and the Pacific and to provide opportunities to boost information-sharing and strengthen collaborative efforts with front-line experts and diverse stakeholders from international organisations, governments, business and NGOs, drawing upon the international/regional networks in which IGES plays an important role. ISAP is made up of the three components: i) Open Sessions, ii) Expert Workshops, and iii) Network Meetings.

ISAP2010, under the main theme of “low-carbon development in Asia and the Pacific,” focused on Climate Change and Sustainable Consumption and Production (SCP) together with important issues in the region including co-benefits, REDD, Clean Development Mechanism (CDM), biofuels, corporate environmental management as well as biodiversity. The forum provided a platform to share the latest research results and actively discuss challenges and potential measures. ISAP2010 launched the Third IGES White Paper which was introduced at relevant events including a Keynote Discussion to discuss and explore the future directions of SCP.

ISAP2010 held thirteen Open Sessions, ten Expert Workshops and one Network Meeting with about 780 participants including more than 60 individuals from overseas for two days in total. Front-line experts and representatives from businesses, international organisations, governments and NGOs attended to discuss issues from diverse perspectives.

4-2 Promotion of Clean Asia Initiative (CAI)

The overall goal of the operation was to contribute to the establishment/elaboration of effective international environmental cooperation mechanisms. In FY2010, the first year of the Fifth Phase, this operation implemented the following activities in three components for further promoting environmental cooperation in East Asia.

Component 1: Networking with Relevant Governments, International Organisations and the Research Community

This component aimed at strengthening and maintaining the network among relevant governments, international organisations and the research community in the region for the promotion of environmental cooperation activities undertaken by MOEJ under the umbrella of CAI.

<Major research activities, outcomes and impacts in FY2010>

- Liaison and coordination with the ASEAN Secretariat, relevant countries and international organisations and the research community in the region, as well as strengthening the network among them.
- Conducted studies on important / emerging environmental issues in the East Asia region grasped understanding of the needs of the present as well as the future.
- Enhanced information dissemination and raising awareness on CAI activities, both domestically and internationally.

Component 2: Provision of Substantive Inputs to the Priority Intergovernmental Policy Processes

IGES provided the priority intergovernmental policy processes with substantive inputs through this operation. Through organisation of the meetings, the political consensus for implementing Environmentally

Sustainable Cities (ESC) project was established. Under the TEMM framework, IGES contributed to the consensus formation process on the future modality of environmental cooperation in three countries (Japan, Korea and China) through the editing of TEMM footprint and the support for the establishment of Joint Action Plan.

<Major research activities, outcomes and impacts in FY2010>

- Supported the East Asian Summit Environmental Ministers' Meeting (EAS-EMM) and its Preparatory Meeting.
- Supported the ASEAN+3 Environmental Ministers' Meeting (ASEAN+3 EMM) and its Preparatory Meeting.
- Supported the Japan ASEAN Environmental Policy Dialogue
- Supported the Tripartite Environmental Ministers' Meeting (TEMM) and its Preparatory Meeting.

Component 3: Examination of Future Modality of Environmental Cooperation in East Asia

Through this operation, IGES examined the future modality of environmental cooperation in East Asia through identification of current and future needs, as well as analysis on the gaps between needs and the current environmental cooperation scheme. Such information was collected from multiple stakeholders such as government officials, international organisations and donor agencies, technical experts from private sector, and members of civil society groups.

<Major research activities, outcomes and impacts in FY2010>

- Conveyed advisory committees which consisted of experts from governments, donor organisations, private enterprise, research organisations, and NGOs, and published "Future Modality of the Environment Cooperation" based on the discussions at the aforementioned committees.

4-3 Monitoring and Advisory Activities on Indonesia Climate Change Program Loan (ICCPL)

The overall objective of the on-going Monitoring and Advisory (M&A) activities on ICCPL is to contribute to further strengthening the climate policy of the Government of Indonesia (hereinafter GOI, the recipient government), as well as to strengthen the capacity of the Government of Japan (hereinafter GOJ, the donor government) to design and implement effective financial assistance scheme. In FY2010, early on in IGES Fifth Phase, GOJ provided the third tranche of a climate change programme loan as a financial assistance towards Indonesia. It was an excellent opportunity for IGES to show its expertise towards effective Climate Change policies, and to put efforts in executing further recommendations. IGES produced a Monitoring Report and an ODA Programme Evaluation Report.

<Major research activities, outcomes and impacts in FY2010>

- The 2009 Monitoring Report: evaluation on achievement of 2009 Policy Matrix
- Programme Evaluation Report (2007-2009): evaluation on contribution of ICCPL phase I (2007-2009) to Indonesian policy reform for addressing climate change.
- Drafted ideas for quantitative indicators of Policy Matrix (2010-2012)
- Drafted Policy Matrix (2011-12)
- Advisory Notes for the Steering Committees

4-4 Civil Society Policy Dialogue and Network Activities for Sustainable Asia and Pacific

The PMO has been carrying out civil society and multi-stakeholder network activities. In order to generate and achieve concrete outputs, a proposal was made to review case studies arising from projects undertaken through network activities, and draw lessons and formulate recommendations in a way that supports the Rio 2012 Summit process. Accordingly, this will focus on institutional frameworks for sustainable development and green economy with an emphasis on the participation of civil society organisations (CSOs). Part of the work undertaken for this purpose is intended to support the component of Governance and Capacity that focuses on participatory environmental decision making. Research work was undertaken in partnership with research institutes in the region, and eight case studies were conducted in FY2010. The research work and the workshop were supported by the IGES Strategy Fund for FY2010.

<Major research activities, outcomes and impacts in FY2010>

- Eight case studies on participatory environmental decision making, drawing on concrete cases from Asian countries
- Questionnaire survey responses and analysis of options for strengthening international environmental governance and institutional frameworks for sustainable development
- Compilation of draft text of inputs from CSOs in the region in order to support the Rio 2012 Summit on institutional frameworks for sustainable development and green economy
- APFED booklet, “Booklet on Good Practices and Innovative Activities 2005-2009” (published in March 2011): this was used as a background document for the aforementioned workshop

4-5 IGES Contribution to United Nations Conference on Sustainable Development (Rio +20)

In order to actively contribute to the preparatory process of United Nations Conference on Sustainable Development (hereinafter Rio+20), IGES has been conducting three key activities: (i) information collection and analysis on the preparatory process of Rio+20; (ii) deepening discussions on two themes of Rio+20, “Green economy in the context of sustainable development and poverty eradication” and “Institutional framework for sustainable development”; and (iii) contribution to the intergovernmental preparatory process of Rio+20. To effectively address and make utmost impacts possible through these cross-cutting processes, PMO is engaged in the all IGES coordination and implementation of the relevant activities.

<Major research activities, outcomes and impacts in FY2010>

- Collected and analysed information of international discussion through Preparatory Committee Meetings/Informal Intercessional Meetings of Rio+20 and relative international conferences such as 19th Regular sessions of UN Commission on Sustainable Development (CSD), 26th UNEP Governing Council (GC)/Global Ministerial Environmental Forum(GMEF) and OECD workshop on the green growth strategy
- Conducted MOEJ commission research on two themes of Rio+20
- Submission of the IGES institutional response to the questionnaires by secretariat of Rio+20 for Synthesis Report and Secretary General Report
- Submission of the IGES institutional response to the questionnaire by ESCAP for regional review on the status of implementation of Agenda 21, Programme for Further Implementation of Agenda 21(PFIA21) and Johannesburg Plan of Implementation (JPOI) in Asia-Pacific region
- Supported the Government of Japan through MOEJ for Rio+20 preparatory process and relative international conference: providing advisory notes before meetings, taking notes and giving information during meetings and summarising discussion after meetings

4-6 Peer Review of the 4th Phase Integrative Strategic Research

The research projects under the Fourth Phase Integrative Strategic Programme were peer reviewed as in the followings. The review reports were publicised on the IGES website. An internal meeting of senior staff members was held in December to summarise the review results for future improvement.

- (1) Climate Change, Market Mechanism, LCS-RNet: 26 August
- (2) Business and Environment: 2 September
- (3) Economic Analysis: 17 September
- (4) PMO, Policy Governance, Capacity Development and Education, Bio-fuel: 22 September
- (5) Waste Management: 23 September
- (6) Freshwater Resource Management, Climate Change Adaptation: 8 October
- (7) Forest Conservation, Ecosystem Services: 14 October

II. Strategies for External Fund-Raising

1. Overall

Taking into account the increasing mid-term/long-term risks on securing financial contributions and research grants to IGES, and the declining financial situation of national and local governments and other institutes seriously influenced by the current economic crises, the financial situation of IGES strategic

research is becoming more uncertain. On the other hand, there is a continuing demand in Asia for strategic research on global environment problems. Thus, the acquisition of external funds for conducting such strategic projects has become more indispensable than ever before for IGES. IGES explored appropriate funding resources actively and selectively, for securing research funds, taking into account the research plan and researchers' capacity. Fund raising activities targeting various funding sources inside and outside of Japan have been conducted actively, based on previous experience, and keeping in mind the basic approach below.

Basic Approach

- (i) Ensure funds for research activities, fully taking into account IGES's Integrative Strategic Research Programme and core competence and research needs in Asia.
- (ii) Ensure funds for active involvement in important policy processes and networking, relevant to the IGES mission.
- (iii) Apply for appropriate funding resources actively and selectively, to secure research funds, taking into account the research plan and researchers' capacity.
- (iv) Place careful consideration on research which may have low cost-benefit or is a completely new area or an area with limited experience within IGES.
- (v) Explore research funding sources, particularly outside of Japan, in close collaboration with IGES partner institutes which have had fruitful experiences.

2. Potential Resources

The total fund obtained was approximately 1,573 million yen⁴. The followings show the major research projects obtained the external funds, according to the categories of external funds.

2-1 Projects from Governmental Agencies

Total 1,263.8 million yen

Projects from the governmental agencies are quite flexible, and many are suited to IGES's research activities. Furthermore, such projects are an important source of external funding, and therefore, IGES, selling its internationality, will place importance on obtaining projects from these governmental agencies.

So far, IGES has received projects mainly from Ministry of the Environment, Japan (MOEJ), as shown below, through a proposal-based bidding process and others.

(a) Commissioned work from Ministry of the Environment

Sub-total 1,192.5 million yen

- Commissioned work on Low Carbon Society International Research Network (LCS-RNet)
- Commissioned work on Coordination and Preparation for COP10 on Biodiversity Convention
- Commissioned work on Promotion of Clean Asia Initiative
- Research on environmental, economic, and social impacts of resource circulation systems in Asia
- Commissioned work on supporting hub-center for Asia and Pacific Region
- Research on the future climate regime

(20 projects in total)

(b) JICA

Sub-total 71.3 million yen

- Advisory and Monitoring Activities on the Policy Targets/Actions regarding Indonesia Climate Change Program Loan[continued]

2-2 Research Grants from Governmental Institutes

Total 181.9 million yen

IGES have submitted applications to the Global Environment Research Fund (MOEJ) and the Grants-in-Aid for Scientific Research (Ministry of Education, Culture, Sports, Science and Technology) and were successful in obtaining funds as shown below. These are proposal-based grant schemes which are suitable for IGES to obtain funds for its research activities. The following are lists of projects accepted

⁴ This amount was obtained by deducting the contract revenues of the "project for public-interest purpose 4" (JISE) from the total amount of contract revenues on the "Statements of Activities Summary" of the FY2010 Financial Statement.

under each grant scheme.

(a) Global Environment Research Fund (MOEJ)

Sub-total 154.96 million yen

- Research on Long-term Low Carbon Policy, taking into account Cultural Diversity in Asia (S-6-2) [continued]
- Research on an International Framework to Promote Countermeasures for Air Pollution in East Asia and a Co-benefit Approach (S-7-3) [continued]
- Research on adaptation policies, adaptation metrics, and identifying win-win adaptation options (S-8-3-4) [new]
- Research on Low-carbon Development in Cities in Asian Developing Countries through International Intercity Partnership (H-96) [continued]

(b) Research Grant for Establishing Sound Material-Cycle Society (MOEJ)

Sub-total 0.63 million yen

- Research on the effective information management system for valuable and hazardous substances contained in products aiming sound international resource circulation [continued]

(c) Japan Society for the Promotion of Science. Grants-in-Aid for Scientific Research B (MEXT)

Sub-total 0.24 million yen

- CO₂ Embodied in International Trade [continued]

(d) JST-JICA Science and Technology Research Partnership for Sustainable Development

Sub-total 26.08 million yen

- Research Partnership for the Application of Low Carbon Technology for Sustainable Development [continued]

2-3 Research Grants from Private Companies

IGES applied to several Japanese funding schemes which target environmental issues; however most of the applications were unsuccessful. The grant amounts are not always big but the proposal-based grant scheme is suitable to IGES research activities. IGES applied for funds positively, using IGES's close cooperation with research organisations within and outside of Japan as its main selling point. The following are lists of projects to which IGES applied under each grant scheme. However none of the applications were successfully accepted.

(a) Toyota Foundation: Research Grand Programme

- Research on labelling and certification schemes of products and services for biodiversity conservation-seeking good linkage between producers and consumers
- Research on an approach toward low-carbon society in rural community in Thailand: bioenergy promotion and poverty eradication
- PES Scheme for rice and rice products of Thailand

(b) Mitsui Bussan Foundation

Research grant programme

- Proposal for achieving sustainable green growth from Asian perspective ~ Restart from [Rio+20 Summit] in 2012
- Research on development community based forestry management model contributing to sustainable development

Activity-based grant programme

- Capacity Development of policy-makers for promoting ESC: through development of regional network in Northeast Asia and ESC leadership programmes

2-4 External Fund-raising Outside of Japan

Total 49.5 million yen

Based upon collaboration with the following research institutes and international organisations in Asia, the external funds outside of Japan below were obtained.

- AECOM
- Economic Research Institute for ASEAN and East Asia (ERIA)
- International Institute for Sustainable Development (IISD)
- Commonwealth Scientific and Industrial Research Organisation (CSIRO)

(11 projects in total)

2-5 Others

Total 78.0 million yen

The following are research projects which were subcontracted from Governmental institutes and private companies. □ shows the subcontractors.

- Japanese Model of Environmental Technologies Disseminated Internationally Based on Investigation in Indonesia [International Center for Environmental Technology Transfer]
- Collaboration for international exchange programme [The Hitachi Environmental Foundation]
- Research on policy options for sustainable use of ecosystem services through internalisation of their economic values [Mitsubishi Research Institute Inc.]
- Research on environmental, economic and social impacts of resource circulation systems in Asia [Mitsubishi Research Institute Inc.]
- Basic study on strengthening mutual supports between trade and the environment: information collection and analysis on boarder measures [Mitsubishi UFJ Research and Consulting Co.,Ltd.]

3. Policy Process Involvements

Networking and policy process involvement, which aims at global environmental conservation and natural environmental protection and are open to various stakeholders, are recognised as important activities of a public-interest corporation. IGES explored appropriate funding sources for i) involvement in important policy processes in Asia, ii) strategic networking with major stakeholders, and iii) development of policy dialogues, based upon the understanding that these activities are important for IGES activities. The followings are major activities.

- (1) Involvement in important policy processes in Asia
 - Initiated operation of Adaptation Network in Asia.
 - Established Co-benefit Partnership in Asia
 - Initiated High-level Seminar on Sustainable Urban City at ASEAN+6
- (2) Strategic networking with major stakeholders
 - Concluded MOUs with UNEP and CBD Secretariat, and an LOI with ADB

4. Capacity Building Activities

Until recently capacity building (CB) activities were limited. However, IGES plans to expand CB activities, one of IGES's core activities, in order to expand its networks through these activities. IGES extended CB activities selectively, in line with the basic direction of the Fifth Phase Integrative Strategic Research Programme. The followings are major activities conducted during FY 2010.

- Local personnel training will contribute to realising CDM projects through coordination between CDM host country governments and project proponents.
- Conducted training programmes under JICA's Water Governance Strengthening Workshop as an implementation agency (This training programme was set up under WEPA where JICA and IGES are in charge of the secretariat.)
- Prepared Discussant learning courses regarding climate change by TERI/IGES initiated by World Bank

III. Information Dissemination and Outreach

IGES introduced its research outputs comprehensively, utilising various media, to various stakeholders so that they are applied to environmental policy-making and activities related to environmental issues in the Asia-Pacific region. IGES also extensively collected and disseminated information on the latest policy trends and research activities on global environmental issues.

1. Publication of IGES Policy Briefs

Through publishing policy briefs, IGES aims to disseminate its research results as policy recommendations in a timely manner. In FY2010, IGES published the following issues based on the Fourth Phase research.

- No. 9 “Reducing Waste through the Promotion of Composting and Active Involvement of Various Stakeholders: Replicating Surabaya's Solid Waste Management Model” (in Japanese)
- No. 10 “Renewable Energy: A Strategic Policy for Sustainable Development”
- No. 11 “Customs Collaboration to Combat the International Trade in Illegal Timber”

2. Information Dissemination through Publications and Periodicals

IGES collects information about its research results and activities as well as on global environmental issues and policies, and publishes periodicals to disseminate this information to the world. In FY2010, the following periodicals were published.

- Newsletter “What’s New from IGES” (three editions) which introduces IGES research activities and seminars, as well as essays and profiles of IGES researchers.
- “Top News on the Environment in Asia” (March 2011) with contributions from 21 countries and three organisations in the region, featuring important news on environmental issues in the Asia-Pacific region in 2010
- “IGES Annual Report FY2009”

3. Information Collection and Dissemination Using Information and Communication Technology (ICT)

In accordance with the first year of the Fifth Phase research programme, IGES updated its website to show its new research structure and latest activities done by all the groups. The monthly average access of IGES website exceeded 61,000 hits for FY2010.

- Environmental information site "IGES EnviroScope" - one of the functions of this site are the research outputs databases, and the data for these was further increased in FY2010 with a total of about 2,300 items of information on research outcomes currently available. The number of downloads exceeded 240,000 in FY2010 which is about 1.2 times compared to that of FY2009.
- E-mail news "E-alert" - linked to the contents of the IGES website, it provides the latest trends and outputs of the research in a timely manner. This year, there were 27 issues (from issue no. 162 to no. 188).
- Online feature “Monthly Asian Focus: Observations on Sustainability”, a series of interviews with the foremost experts in their fields has been started on IGES website from January 2011.

4. Providing Opportunities for Policy Discussion

IGES organised the International Forum for Sustainable Asia and the Pacific 2010 (ISAP 2010) as an all-IGES event to stimulate policy discussions with key stakeholders concerned, both domestic and international. Several side events were also organised with timely themes at various international conferences such as UNFCCC COP16, and will hold a variety of meetings as the secretariat or the focal point of international networks such as AECEN, Asia Pacific Climate Change Adaptation Network, APFED, ENVForum, Regional 3R Forum in Asia, LCS-RNet, and Water Environment Partnership in Asia (WEPA). Through these activities, IGES provided opportunities for discussion amongst governments, businesses, NGOs/NPOs and researchers thereby promoting policy formation for the realisation of a sustainable society.

5. Seminars/Symposium for contributions to local communities

In order to disseminate research activities and results to a wide audience, IGES holds seminars for governments, businesses, NGOs and local residents, independently or in cooperation with other concerned organisations. In FY2010, IGES organised the following seminars/symposia.

- “Shonan Academia - Latest Issues on Climate Change from Natural Science, Economic, and Political Perspectives” in cooperation with Kanagawa International Foundation (Hayama, January 2011)
- “Global Environmental Seminars” to introduce its research activities and results to a wide public audience.
 - #1 “Preview on the Convention on Biological Diversity (CBD) COP10” (Tokyo/ October 2010)
Focusing on "the Economics of Ecosystems and Biodiversity (TEEB)"final report, this seminar discussed the possible direction of talks at CBD COP10 and its impacts on economy as well as corporate activities.
 - #2 “Report on UNFCCC COP16 and future developments” (Yokohama/ December 2010)
The seminar provided an immediate report on the important topics discussed at COP16 and presented perspectives and challenges on climate change measures from the view point of IGES.
 - Due to the Great East Japan Earthquake, the Global Environmental Seminar #3 and #4 which were supposed to be held in March 2011 were cancelled.
- Seminar to Report on COP16 and COP/MOP6 in cooperation with Global Industrial and Social Progress Research Institute (GISPRI) (Tokyo/ January 2011).
Representatives from four government ministries and agencies who were actually involved with negotiations at COP16 and COP/MOP6, reported on developments, decisions and future outlooks. They provided comprehensive information on international negotiations on the problem of global warming, aiming to promote further understanding of international trends on climate change issues.

IV. Other Activities

1. IGES Strategic Fund

The IGES Strategy Fund was introduced in April 2008, aiming to promote innovative policy ideas among IGES researchers. In FY2010, the following three studies were selected and implemented from among six applications.

- (i) Climate change and adaptation to water scarcity: Strategies for integrated water and land use management to enhance the resilience of rural communities in the Gangetic Basin (Natural Resource Management Group)
- (ii) Application of eco-efficiency as a strategic policy tool towards green growth for the rice industry in ASEAN countries (Bangkok Office)
- (iii) Demonstrating models of institutional frameworks for promoting participatory approaches to sustainable development in Asia and the Pacific (PMO in collaboration with the Governance and Capacity Group).

2. Capability building of research staff and promotion of researchers' exchange

To facilitate inter-groups information exchanges and to discuss issues common to every group, IGES held in-house seminars. In addition, special lectures were planned and organised for IGES staff members on the occasion of the visit of both domestic and overseas researchers of relevant fields.

3. Eco Action 21

IGES Centre for Sustainability (IGES-CfS) operated a system for the certification and registration for Eco-Action 21 which “formulates, operates and maintains a system which makes effective and efficient efforts for the environment, targeting the environment and summarising, evaluating and reporting on actions and results” of a wide range of small and medium companies, schools and public institutions. By the end of March

2010, there were 6300 enterprises certified and registered for Eco-Action 21.

The system in FY2010 showed that the number of Eco-Action 21 inspectors had risen to 829 nationally, while the number of regional offices showed no change from the previous year, with 47 organisations in 35 prefectures. In line with the “EcoAction 21 Guidelines for 2009”, revised by the Ministry of the Environment in November 2009, the regional offices held briefings in FY2010, to explain the revised guidelines to businesses. Aside from general businesses, there was an increase in certification of medical facilities, major car dealers, local authorities and educational corporations etc. There was also increased awareness of Eco Action 21 from local authorities, educational institutes and major businesses.

4. IGES affiliate member system

IGES provided such services to members as priority invitations to various symposia and seminars, and distribution of publications. The number of affiliate members as of 31 March 2011 is as follows:

	Full member	Associate member	Total
Corporate	15 (+1)	0(0)	15 (+1)
NGO	1 (0)	0 (0)	1 (0)
Individual	58(-5)	4 (-1)	62 (-6)
Student	2 (-2)	1 (0)	3 (-2)
Total	76 (-6)	5 (-1)	81(-7)

Note: The figures in the parenthesis are differences from the previous year.

V. Business on Special Accounts

1. Administration of the Technical Support Unit (TSU) for the IPCC-TFI

The goal of the TSU is to support and manage the Intergovernmental Panel on Climate Change (IPCC) Task Force on National Greenhouse Gas Inventories (TFI) work programme which has the following aims:

- Developing and refining an internationally-agreed methodology and software for the calculation and reporting of national GHG emissions and removals
- Encouraging the widespread use of this methodology by countries participating in the IPCC and the Parties to the United Nations Framework Convention on Climate Change (UNFCCC)

For these purposes, the TSU implemented the following components and offered its support to the other relevant sections of IGES and other organisations.

1-1 IPCC Emission Factor Database (EFDB)

This component aimed to maintain and improve a database of emission factors and other parameters where national experts can find nationally appropriate values that are specific to their national circumstances to supplement the IPCC inventory guidelines. In FY2010, the following activities were implemented.

- Potential data identified and submitted for approval by Editorial Board
- Support of data management and data approval process provided
- One data collection meeting on soil N₂O in Sao Paulo, Brazil
- Organisation of the 8th meeting of the EFDB Editorial Board in Sao Palo, Brazil

1-2 International Expert Meetings on Greenhouse Gas Inventories

This component aimed to organise, host and publish the results of expert meetings on topics chosen to provide additional information and support to inventory compilers. Thus the topics were areas and issues that had caused inventory compilers difficulties and are identified by the Bureau of the TFI.

- Organisation of an expert meeting on use of models and measurements (August 2010, Sydney)
- Hosting the 22nd meeting of the Bureau of the TFI (August 2010, Sydney)

- Organisation of expert meeting on HWP, Soil N₂O and wetlands at request of UNFCCC (October 2010, Geneva)
- Organisation of expert meeting on scoping additional guidance on wetlands at request of UNFCCC (March 2011, Geneva)

Publication and dissemination of results of meetings, including meetings held in FY 2009 on topics such as Revisiting the Use of the Managed Land Proxy; Use of FAO datasets; and Uncertainties and Validation of Emission Inventories.

1-3 Software for the 2006 IPCC Guidelines for National Greenhouse Gas Inventories

This component aimed to implement the default methods in the 2006 IPCC Guidelines in an easy-to-use software package. In FY2010, the following activities were implemented in order to complete the software.

- The phase 2 software production has been extended to all sectors
- An expert meeting to review the software and plan any additional requirements (December, Sao Paulo, Brazil)

2. Asia-Pacific Network for Global Change Research (APN) Secretariat

APN is an inter-governmental network whose mission is to foster global change research in the Asia-Pacific region, increase developing country participation in that research and to strengthen interactions between the science community and decision-makers. In order to support and build on the capacity of scientists in the fields of global change research, especially in developing countries, APN conducted the following activities.

2-1 Support of Research and Capacity Development, Related to Global Change through Competitive Calls for Proposals

(1) Support of research projects, selected through the Annual Regional Call for Proposals (ARCP)

In FY2010 APN supported international research projects selected by the 15th Inter-Governmental Meeting (IGM).

(2) CAPaBLE Programme (Scientific Capacity Building and Enhancement for Sustainable Development in Developing Countries)

In order to improve the scientific capabilities of developing countries, APN supported capacity building activities for young, aspiring scientists and joint research activities of leading scientists in developing countries.

(3) Global Change Research on local community

- Execute Projects in cooperation with Hyogo Prefecture
- Research on strengthening Coastal Zone Management

2-2 Inter-Governmental Meeting and Other Meetings

APN conducted the 16th Inter-Governmental Meeting (IGM) and the Scientific Planning Group (SPG) Meeting in Colombo, Sri Lanka.

3. Activities of the Japanese Centre for International Studies in Ecology (JISE)

Aiming to realise a sustainable society through ecological study, JISE conducts practical research toward restoring and creating the environment from regional to global level, offers environment-related training programmes, and collects and provides environmental information. JISE implemented the following activities aiming to promote academic research and to contribute to the conservation and restoration of regional and global environments.

3-1 Research Projects

JISE implemented practical research regarding environmental conservation and restoration based on

ecological study on themes such as “Restoring tropical forests (Malaysia, Brazil and Kenya)”, “System of actual and potential natural vegetation in Asia and the Pacific (Thailand and Iwate Prefecture, Japan)”, “Structure and dynamics of regional ecosystems” (Lao PDR, Hokuriku region and Sagami Bay, Japan) and “Disaster-prevention function of environmental protection forests” and “Structure and dynamics of regional ecosystems including their evaluation (Lake Biwa and Izu Peninsula, Japan). For the above research, JISE used its own financial resources and also received research grants from many external sources as the New Technology Development Foundation, Foundation of River and Watershed Environment Management and the National Land Afforestation Promotion Organization. The research outcomes were announced at the International Society of Vegetation Science, the Ecology Society of Japan, and the Society of Vegetation Science (Japan). In addition, JISE strengthened its networks with universities and research institutes as well as working on reforestation case studies in collaboration with national and local governments and the private sector.

JISE also cooperated with IGES headquarters to implement and guide a Tree Nurturing event (May, 2010), two years after the tree planting ceremony to mark IGES 10th anniversary held at Shonan International Village in 2008.

3-2 Capacity building

Targeting the staff members of private companies and organisations which either plan to, or currently do hands-on activities related to environmental projects, JISE implemented training courses on ecological study with the ultimate goal of establishing forests for environmental conservation. In addition, following on from last year, JISE was commissioned by JICA for a study on “Vegetation restoration in degraded land in Asia and Africa” (Regional research for 2010) and with its position as a top-ranking training centre, JSIE implemented training for nine participants from overseas. JISE also carried out projects which contribute to the development of human resources specialising in environmental conservation and restoration through ecological study, such as environmental learning geared for the general public.

3-3 Interaction

JISE has made improvements to the database for information regarding phytosociological vegetation data (such as vegetation units and vegetation system) and resumed dissemination of the information via the internet., and in cooperation with Yokohama National University GCOE⁵ “Global Eco-Risk Management from Asian View Points” it went ahead with updating a database compiling vegetation surveys, which will be open to the public in 2011. Two JISE public seminars were held for researchers and students to share the research results and exchange views with the participants.

3-4 Dissemination and education

In July 2010, JISE conducted a tour for the reforestation of tropical forests in Borneo with the aim of planting 3000 trees, and an ecotour was implemented in Germany in August 2010. Activities of JISE as well as the efforts of the Director and individual researchers of JISE for the promotion of environmental conservation were introduced to the public through the JISE website. JISE also published “Eco-Habitat: JISE research”, which is a bulletin containing JISE research results for dissemination and enlightenment.

VI. Administration

1. Meetings of the Boards of Directors and Trustees

Regular meetings of the Board of Directors and the Board of Trustees were held as follows.

- The 28th Meeting of the Board of Directors
Date: 25 June 2010
Venue: Headquarters of the Institute for Global Environmental Strategies

⁵GCOE: Global Center of Excellence is a funding scheme of MEXT aiming to enhance the educational and research capacity of graduate schools so as to elevate international competitiveness of Japanese universities. A few universities are selected as GCOE that will provide education with higher quality.

Principal agenda items: Approval of the draft IGES Business Report and the draft FY2009 Settlement Statement
Election of a member of the Board of Trustees of IGES
Approval of the Election Method for the first Trustees after the introduction of the new public-interest corporation system
Approval of the Organisational Design in response to the new system for public-interest corporations

- The 17th Meeting of the Board of Trustees

Date: 26 February 2011 (AM)

Venue: Headquarters of the Institute for Global Environmental Strategies

Principal agenda items: Election of members of the Board of Directors and Auditors of IGES from 1 April 2011

Election of first members of the Board of Directors of IGES after IGES's transition to the new system for public-interest corporations

Approval of the draft Articles of Incorporation of IGES after the introduction of the new system for the public-interest corporation system

Draft FY2011 Business Plan and Budget of IGES

Establishment of the regional office in Bangkok

- The 29th Meeting of the Board of Directors

Date: 26 February 2011 (PM)

Venue: Headquarters of the Institute for Global Environmental Strategies

Principal agenda items: Approval of establishment of the regional office in Bangkok and related Regulations for Management of IGES (Draft)

Approval of the draft IGES Business Plan and Budget for FY2011

Election of members of the Board of Trustees of IGES and recommendation of Counsellors and Honorary Advisors from 1 April 2011

Approval of the draft Articles of Incorporation of IGES after the introduction of the new system for the public-interest corporation system

2. Senior Staff Meetings (MSS)

A total of eleven MSS Meetings were held to discuss issues in implementing strategic research as well as to exchange information on research activities of each of the groups.

3. Response to the new public-interest corporation system

The revised Public-interest Corporation System has been implemented since December 2008, and current public interest corporations are required to make the transition either to a "public-interest corporation" or to a "general corporation" or must be dissolved by November 2013. IGES is also required to respond to the new system and internal discussions have been taking place since FY2009. The results of discussion on IGES's compliance to the standards of the public-interest corporation, as well as the design of the basic governance structure including boards of directors and trustees of IGES, were presented at the Board of Directors meeting in June 2010. Following this, the draft Articles of Incorporation was drawn up with reference to an exchange of opinions among Directors and Trustees by e-mail, and was submitted at the Board meetings in February 2011 when it was duly approved. In addition, it was necessary to select Trustees and Directors for the new public-interest corporation and put their names on the Articles of Incorporation, and therefore a Selection Committee for the first Trustees was established and the Trustees were selected in January 2011. The Directors were selected in February 2011 by the Board of Trustees.

4. Research and Secretariat staff

Personnel (as of 31 March 2011)

			(Short term)	(Non-Japanese)
Research Employees	Strategic Research Project	95	(38)	(31)
	Special Account	8	(0)	(3)
Administrative Employees	General Administration	21	(9)	(1)
	Research Support	28	(19)	(1)
	Special Account	16	(6)	(3)
Total		169	(72)	(39)

*Subtotal in brackets for employees under short-term contract and non-Japanese employees.