

# **The Business Plan for FY 2012**

## **Institute for Global Environmental Strategies**

To implement strategic research and to be flexible enough to cover a broad range of issues for integration of environment protection and sustainable development in the Asia-Pacific region, the Integrative Strategic Research Programme of IGES for the Fifth Phase (ISRP5) starting from April 2010 introduces four criteria (“relevance”, “value added”, “influence generation” and “appropriate resource allocation”) and proposes research projects based on these criteria. In FY 2012, the final year of the Fifth Phase, IGES will implement 35 research projects<sup>1</sup> under five research groups and the Programme Management Office (PMO), as well as at each of the four satellite offices of IGES, aiming to bring qualified results and to generate effective impacts based on ISRP5.

The Fourth IGES White Paper is scheduled to be launched in the summer of 2012, under a working title of “Greening Governance in Asia-Pacific”, which is linked with the dual themes of the UN Conference on Sustainable Development 2012 (Rio+20). In addition, the Fourth International Forum for Sustainable Asia and the Pacific (ISAP) will be organised in July as a platform to disseminate the research results of IGES as a whole and to encourage discussion among experts from diverse countries. ISAP2012, under the main theme of “Beyond Rio+20”, will discuss on the important agenda in the region including climate change, green economy, resilience, sustainable development goals (SDGs), and bio-diversities.

To secure stable funds for the final stage of the Fifth Phase research, efforts to raise funds will continue in parallel with research activities.

The following business plan is based on current revenue estimations, and therefore the actual business activities might be modified depending on possible changes in revenue.

### **I. Strategic Research**

ISRP5 categorises IGES strategic research as 1) Issue Cluster, 2) Discipline Cluster, and 3) Stakeholder Cluster, within which five research groups, namely, Climate Change, Natural Resources Management, Sustainable Consumption and Production, Economy and Environment, Governance and Capacity, as well as the PMO and four satellite offices, will conduct research on their own initiative.

#### **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 FY2012, 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 analyse domestic policies and international policy such as numerical

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<sup>1</sup> \* mark is attached to the name of research components which correspond to these 35 research projects.  
[NEW] mark designates research items which were not described in the FY2011 Business Plan.

commitment GHG emission reduction in Asian countries, especially China, India, Indonesia. Main activities in FY2012:

- Analysis of the domestic/international policy and institution in Asian countries.
- Organization of a stakeholder consultation on low-carbon development in China (and India, if possible)
- Analysis of the implementation and linking strategy for the Asian-wide carbon market under various types of crediting systems

### **Component 2: Post-2012 Climate Regime\***

With a view to making timely and pragmatic policy recommendations with regards to the post-2012 regime discussion, this component will conduct the following activities in FY2012:

- Analysis of how the negotiating positions of Asian developing countries on building blocks of a future climate regime (e.g. a measurement, reporting and verification (MRV) system, a technology mechanism and a financial mechanism) were determined and how agreements can be effectively implemented at the domestic level
- Proposal for the new protocol or UNFCCC COP decision for a future regime based on the Durban agreement [NEW]
- Quantitative and qualitative comparability analysis of the commitment and measures of the major economies including Japan [NEW]
- Analysis of the financial scheme for supporting developing countries [NEW]
- Publication of issue briefings on key elements of the diverse agreements and initiatives
- Organisation of expert consultations on a future climate regime in China and India

### **Component 3: Institutional Design of an MRV (Measurement, Reporting and Verification) System\*<sup>2</sup>**

This component aims to understand the negotiating positions of different countries on a MRV system; and identify how a MRV system could be operationalized in Asian developing countries (including possible synergies with GHG inventories).

- Methodology of quantitative analysis on the emissions reduction amount by implementing NAMAs.
- Detailed proposal for the institution building for MRV systems such as the matching of registry and finance.
- International comparison of MRV systems in the major economies

This component also quantitatively evaluates the impacts on international competitiveness, productivity and decision-making under a carbon constraints business environment. This research will be partly conducted in collaboration with Economy and Environment Group (EE).

### **Component 4: 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. Main activities in FY2012:

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<sup>2</sup> This component is a part of the integrative research component on MRV-related capacity development conducted by Programme Management Office (PMO).

- Support of Asian Co-benefits Partnership to improve coordination between organisations promoting co-benefits in Asia
- Estimation of co-benefits in the key GHG mitigation sectors, including transport and waste management
- Analysis of barriers to realising co-benefits in key GHG mitigation sectors, including transport and buildings
- Ideal MRV system for the evaluation of the co-benefits
- Development of a integrated model of air pollution and climate change (MERGE model) in cooperation with Tohoku University [NEW]

In this component, collaboration will be made with the Kansai Research Centre, which is responsible for technical aspects of the co-benefit approach, focusing on preparation of technology maps and specific feasibility studies particularly related to co-benefits between pollution control (including air pollution) and climate change measures.

#### **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 scientific information exchange and research cooperation on LCS policies. Main activities in FY2012:

- Continued development and strengthening of LCS-RNet
  - Promotion of information exchange and collaboration of member research institutions, with more participation from G20 and other countries
  - Organization of the LCS-RNet 4th annual meeting, to be held in UK
  - Publication of a synthesis report on the LCS-RNet 4<sup>th</sup> annual meeting
  - Organization of a side-event at COP18, launching the synthesis report
- Analysis of shared challenges in promoting LCS policies and research needs
  - Publication of a supplementary issue of “Climate Policy” on Low-carbon Society Research
  - Execution of a trend survey on low-carbon research
- Improving LCS research capacity in Asia
  - Support for the promotion of science-based LCS in Asia
  - Promotion of information exchange amongst researchers in Asia to improve LCS research capacity in the region.
  - Preparation for establishing a network called the “Low Carbon Asia Research Network” (LowCARNet)

#### **Component 6: Development of Renewable energy model for Japan [NEW] \***

After the Eastern Japan disaster happened on 11 March 2011, a revision of the energy system and energy mix is of great importance. By using a model such as the TIMES model which is a end-use model and with the help of Economy and Environment Group, this research will examine the best (optimal) mix of energy and propose the sustainable and safe energy system.

- Analysis on best-mix of electricity generation with enhanced use of renewable energy resources in Japan as a whole.
- Analysis on best-mix of electricity generation and the optimal power-supply system at the regional level

## **1-1-1 Market Mechanism Sub-Group**

### **Component 1: Effective Market Mechanisms to reduce GHG emissions for Developing Countries in Asia\***

This component aims to implement new market-based mechanisms under the post-2012 climate regime and further improve the existing market mechanisms such as CDM as a possible foundation for the establishment of new market-based mechanisms. With these ultimate aims, the main activities in FY2012 focus on:

- Designing new market-based mechanisms under the post-2012 climate regime and making proposals (Policy paper).
- Capacity building for implementation of new market-based mechanisms in Asian developing countries, particularly to assist developing systems to measure, report and verify (MRV) greenhouse gas (GHG) emissions reduction.
- Making proposals for improvement of existing market mechanisms such as CDM .
- Analytical research based upon IGES CDM and JI related databases.

In addition, this component also provides those countries who intend to establish their own domestic carbon market with a range of support for their "market readiness" such as:

- Designing and proposal for domestic emission trading and/or VER (verified emission reduction) schemes.
- Capacity building for implementation of domestic emission trading and/or VER schemes.

### **Component 2: Support for Institutional Design of an MRV (Measurement, Reporting and Verification) System for GHG emission reduction/sink<sup>\*3</sup>**

This component aims to assist developing systems to measure, report and verify (MRV) greenhouse gas (GHG) emissions reduction and/or sinks in developing countries, as a basis of new market mechanisms. The following activities will be comprehensively implemented by utilising knowledge and networks of other research groups in IGES.

- Examination of methodological issues of MRV for GHG emission reduction/sinks as a basis of new market mechanisms
- Capacity building for effective implementation of MRV system for GHG emission reduction/sinks

## **1-2 Natural Resources Management Group (NRM)**

The Natural Resources Management Group will conduct comprehensive research aiming to develop policy proposals which enhance the environmental values of natural resources as well as conserve and promote sustainable use of those resources in the Asia-Pacific region. Its research components include forest conservation, freshwater management and climate change adaptation. It also covers biodiversity and ecosystem services as a common issue for the above three research areas.

### **Component 1: Biodiversity and Ecosystem Services\***

Based on the international process scheduled for 2012 relating to the ecosystem and conservation of

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<sup>3</sup> This component is a part of the integrative research component on MRV-related capacity development conducted by Programme Management Office (PMO).

biodiversity at conferences such as Rio+20, the 5<sup>th</sup> World Conservation Congress and 11th meeting of the Conference of the Parties to the Convention on Biological Diversity (COP11), we will continue to make contributions to and liaise with research institutes including the UNU, as well as implementing policy research on the SATOYAMA Initiatives and conducting investigative research on economic mechanisms to protect ecosystem services and biodiversity. This research will be carried out by the Programme Management Office (PMO).

### **(1) Policy research on the SATOYAMA Initiative and dissemination of results**

IGES is a member of the International Partnership for the SATOYAMA Initiative (IPSI) which was established at the CBD COP10 in 2010, and which has its Secretariat at the United Nations University Institute of Advanced Studies (UNU-IAS). In collaboration with UNU-IAS, IGES will aim to carry out policy research promote this Initiative and disseminate the results. The following projects will be conducted in 2012:

- As a joint project with IPSI, and in collaboration with UNU-IAS, a review will be made of case studies to maintain and restore socio-ecological production landscapes. Necessary additional surveys will be conducted, and resources and information contributing to policy formation will be shared at IPSI-related meetings and at COP11
- Policy research outcomes will be disseminated via the IGES network etc. In particular, a workshop and session is being scheduled at ISAP2012 held jointly with UNU-IAS, to promote this initiative internationally.
- We will implement other activities and studies to contribute to the policy research and results for this initiative.

### **(2) Study on economic instruments for biodiversity and ecosystem services**

Based on related studies being carried out in FY2012 (such as evaluation methods of biodiversity off-sets), we will continue to implement the following studies on the title topic:

- Payment for ecosystem services (PES)
- Biodiversity off-sets
- The Economics of Ecosystems and Biodiversity (TEEB)

The implementation of these studies will be carried out jointly with the Economy and Environment Group (EE).

### **(3) Other research on the ecosystem and conservation of biodiversity**

We will conduct studies on issues related to ecosystem and conservation of biodiversity.

## **Component 2: Climate Change Adaptation\***

The goal of this component is to strengthen knowledge for promoting science-based adaptation in the Asia-Pacific region. In FY2012, the Adaptation Team will continue to conduct result-oriented research on the sub-components listed below.

### **(1) Adaptation metrics and decision making frameworks**

This study aims to measure the effectiveness of adaptation actions and measure progress in mainstreaming adaptation in sectoral and national policies in the Gangetic Basin and to develop a decision-making framework for identification of win-win adaptation actions in Asia-Pacific region (Global Environment Research Fund (MOEJ: Ministry of the Environment, Japan) in collaboration

with BCAS, TERI and ICIMOD).

Main activities in FY2012 are:

- Continuing literature review for identifying processes and methods of mainstreaming adaptation. Conducting questionnaire survey in the study locations with the help of local collaborators and analyzing the survey data to define effective adaptation options in the Gangetic Basin.
- Organizing consultation meetings and sound communication with partner institutions on research conducted above.
- Prepare research reports, journal papers and book chapters based on the research conducted above.

## **(2) Adaptive policies in Japan**

This study aims to identify factors behind design and implementation of policies that are adaptive in nature based on a case study of agriculture policies in Japan. This is continuation of the APN-funded project being implemented in collaboration with UKM, Malaysia.

Main activities in FY2012 are:

- Continue Delphi survey of respondents of the first iteration survey conducted in FY2011.
- Statistical analysis of survey results and writing of paper based on outcomes.
- Using the modified Tear Fund framework, measure the progress in institutional mainstreaming of climate change adaptation by conducting survey of important institutional stakeholders to in Japan and write results.

## **(3) Risk Insurance Systems for Promoting Climate Change Adaptation and Disaster Risk Reduction in Asia [NEW]**

This study aims to find how risk insurance will contribute to adaptive capacity and measures needed to improve the existing risk insurance mechanisms in collaboration with BCAS, NCES, Hanoi Architectural University, Universiti Kebangsaan Malaysia, and University of Philippines at Los Banos. (if funded) Main activities in FY2012 are:

- Devise and implement project communication plan & agree on specific project targets.
- Review literature and conduct regional consultation and project planning meeting (tentatively in Bangkok) on current risk insurance mechanisms and identify barriers to promoting risk insurance in the study countries.
- Annual technical and financial report to the donor agency (APN/Mitsui Foundation).

## **(4) Collaboration with other projects**

- Collaboration with APAN: Supporting various activities of APAN (Bangkok Regional Centre)
- Contribute to monitoring and mentoring APFED Showcase projects in Philippines (continued activities).
- Contribution to Chapter 24 of the 5th AR of IPCC (Asia) under livelihoods, food production systems and food security.

### **Component 3: Forest Conservation through REDD+<sup>4</sup> and Forest Products Trade\***

The objectives of the research on forest conservation are to:

- (i) Provide guidance on engaging local communities in carbon accounting and other aspects of REDD+;
- (ii) Provide critical analytical inputs for the REDD+ negotiations and the development of effective, efficient and equitable national REDD+ administration and strategies;
- (iii) Contribute to the development of MRV (Measurement, Reporting and Verification) systems for REDD+<sup>5</sup>;
- (iv) Deepen understanding of the strengths and weaknesses of regulatory initiatives in consumer countries to curb the import of illegal forest products.

In FY2012, this research aims to provide analysis and guidance on REDD+ and assess consumer country responses to the trade in illegal timber. For that purpose, each sub-component will implement the following activities:

#### **(1) Community Carbon Accounting**

This component consists of action research and capacity building to develop and test the concept of community carbon accounting (CCA). Main activities in FY2012:

- Action research on CCA in Lao PDR, Indonesia, PNG, Cambodia and Viet Nam
- Study of the relevance of CCA to REDD+ safeguards
- Policy Report / Manual (target date: December 2012)

#### **(2) REDD+ Database**

This component includes managing, updating and expanding the IGES REDD+ Database and using the information compiled in the database for research. Main activities in FY2012:

- Draft profiles of REDD+ demonstration activities
- Summarize the profiles using a matrix
- Reports on REDD+ readiness in five countries – Indonesia, PNG, Lao PDR, Viet Nam, Cambodia – (target date: July 2012)
- Peer reviewed journal articles comparing REDD+ demonstration activities (target date: July 2012)

#### **(3) International REDD+ negotiations**

The aim of this component is to provide inputs into the international REDD+ negotiations. Main activities in FY2012:

- Finalize draft forest sector governance standard for Nepal by conducting an international public review
- Organize a side event to present the governance standard

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<sup>4</sup> REDD+: Reducing Emissions from Deforestation and Forest Degradation and conservation of forest carbon stocks, sustainable management of forest, enhancement of forest carbon stocks.

<sup>5</sup> This component is a part of the integrative research component on MRV-related capacity development conducted by Programme Management Office (PMO).

#### **(4) Analysis of voluntary REDD+ standards<sup>6</sup> [NEW]**

This research aims to draw lessons from the Verified Carbon Standard (VCS), etc. for national REDD+ MRV and bilateral mechanisms. Main activities in FY2012:

- Assessment of the VCS processes, standard and methodology, etc.

#### **(5) Forest products trade**

This research aims to evaluate measures taken by consumer countries to curb the import of illegal forest products. Main activities in FY2012:

- Assessment of the US Lacey Act, the EU Timber Regulation, public procurement policies and other consumer country measures (if funded)
- Academic paper (target date: December 2012)

### **1-2-1 Freshwater Sub-Group**

The goal of the Freshwater Sub-group is to enhance water governance for sustainable development. These activities are originally composed of two components: research entitled “Groundwater Governance for Sustainable Development” and a non-research activity “Water Environment Partnership in Asia (WEPA)”. In FY2012, the Second Asia-Pacific Water Summit will be organised in May 2012, Thailand. The Freshwater sub-group will share its findings with a wider audience who will participate in the summit and also strengthen the existing network.

#### **Component 1: Groundwater Governance for Sustainable Development\***

This research is composed of (i) Baseline study of groundwater and its governance in Asia and (ii) In-depth study on enabling environment for the introduction/effective implementation of economic instruments for sustainable development. This component will be conducted as an integral part of the activities related to the Asia-Pacific Water Forum Water Knowledge Hub Network on Groundwater.

##### **(1) Baseline study of groundwater and its governance in Asia**

- Literature review
- Local data collection
- Production of groundwater basic information sheets (country or sub-region basis)

##### **(2) In-depth study on enabling environment for the introduction/ effective implementation of economic instruments for sustainable development]**

- Case studies (Lao PDR and others)
- Follow-up the case studies on Sustainable Water Management Policy (SWMP) focusing on application of economic instruments (Bangkok (Thailand), Bandung (Indonesia) and Ho Chi Minh City (Viet Nam))

##### **(3) APWF Groundwater Knowledge Hub related activities**

- Participation in the Asia-Pacific Knowledge Hub Network Meeting and other related meetings for information collection and networking (holding a side-event with the Department of Groundwater Resources, Thailand; exhibition)

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<sup>6</sup> This component is a part of the integrative research component on MRV-related capacity development conducted by Programme Management Office (PMO).

- Contribution to Asia-Pacific Water Forum by providing inputs from the network or IGES activities
- Knowledge-hub website management
- Knowledge-hub Policy Briefs

### **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 duties for the partnership initiative among 13 Asian countries. With the aim of promoting water environmental governance, the following activities will be implemented in FY2012. A detailed plan of activities of WEPA will be decided by MOEJ referring to the discussion of the WEPA Advisory Meeting.

- Domestic Advisor Meeting (held twice, Tokyo)
- WEPA International Workshop (held once, in a partner country)
- Annual Meeting (held once, in a partner country)
- Bilateral meeting (in one partner country)
- A session at the Asia-Pacific Water Summit to share the WEPA findings with wider audience
- Survey in several WEPA partner countries on priority topics (domestic wastewater treatment and water environment and climate change).
- WEPA database (on web-site) update

### **Component 3: Development of NAMAs in wastewater sector<sup>\*7</sup>**

A study for development of NAMAs in wastewater sector will be conducted, which includes investigation of possible MRV for NAMAs and GHG reduction potential in wastewater sector. Field surveys will be conducted in a few Asian countries such as Malaysia and Viet Nam.

## **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 and energy resources) and how the environmental impacts associated with those materials over their life-cycles can be reduced through policy interventions. In FY2012, the third and final year of the Fifth Phase, the group aims to continue the work carried out earlier, whilst also trying to strengthen the new research focus on sustainable consumption in Asia. For that purpose, each component of the group will implement 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. Main activities in FY2012:

- Studies on transitioning to energy efficient housing in developing Asia (Funded by ADB)

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<sup>7</sup> This component is a part of the integrative research component on MRV-related capacity development conducted by Programme Management Office (PMO).

- Capacity strengthening activities as part of the Policy Support Component of EU's SWITCH Asia Programme (Funded by UNEP)
- Organizing the Global Research Forum on SCP as a back-to-back event with the Rio+20 summit (in collaboration with a consortium led by the Tellus Institute)
- Initial studies supporting the recently established ASEAN SCP Forum
- MRV Capacity Development for measuring energy consumption and GHG emissions from urban residential buildings<sup>8</sup>

### **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. Main activities in FY2012:

- A study on recyclers certification for sound management of e-waste in Asian countries (Kakenhi-Hojokin)
- A study on certification and quality control in the recycling industry in collaboration with MOEJ as a possible input to ESM negotiation at the Basel Process
- Policy brief on the information sharing of e-waste management with the material life-cycles view
- Policy brief on the policy options for international trading on e-waste and e-scrap

### **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. It will be conducted in collaboration with the Economic and Environment Group as required. Main activities in FY2012:

- Start up the 2<sup>nd</sup> phase of the research network associated with the Regional 3R Forum. Main focus would be two international working groups on: 3R indicators (possible future collaboration with projects on SDGs or Green Growth Indicators), and international resource circulation.
- Collaborative Policy Brief Series/ Technical Paper Series based on the results of 1<sup>st</sup> Phase of Asia Resource Circulation policy Research.
- Contribution to the draft list of 3R policy indicators annexed to Hanoi Declaration of Regional 3R Forum in Asia
- Project to support national 3R Program for Viet Nam and Malaysia (Collaboration with KUC). Coordination with JICA on SWM Program for MOC of Viet Nam.

### **Component 4: Sustainable Waste Management with Multiple Benefits\***

This component aims mainly to identify feasible options for local governments to maximise utilisation and minimise disposal of waste by introducing the 3Rs and to raise awareness on the associated benefits on climate change, food and energy security, and employment and poverty reduction. Main activities in FY2012:

- IGES/UNEP-IETC joint Policy Brief on policies to promote biological treatment of organic waste

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<sup>8</sup> This component is a part of the integrative research component on MRV-related capacity development conducted by Programme Management Office (PMO).

- IGES policy brief on integrated solid waste management and climate change mitigation in Thailand
- Academic papers on GHG emission reduction through integrated solid waste management in Thailand
- Conference papers on waste management and climate change mitigation
- A study on MRV methodologies for improved waste management and recycling (Phase II): capacity building and NAMA development (if funding is available)<sup>9</sup>
- Appropriate recycling business model for developing Asian countries (Funded by ADB)
- Integrated assessment of multiple benefits of integrated solid waste management in developing Asian countries

## 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 economy. In FY2012, the group will implement the following activities, in many cases collaborating with other groups including Climate Change Group (CC), Sustainable Consumption and Production Group (SCP), and Natural Resources Management Group (NRM).

#### **Component 1: Integrated Policy Impact Assessment for Sustainable Development\***

This component aims to develop a model for integrated policy impact assessment of sustainable development based on economic models which have been developed so far. In addition to top-down general equilibrium type models such as CGE and IO models, we will develop capacity to use bottom-up energy models such as TIMES model or IIASA's MESSAGE model to address emerging policy questions. Main activities in FY2012 under this component include:

- Start the second phase of two Policy Studies on Environmental Economics (PSEEs), in which we will elaborate computable general equilibrium (CGE) in order to conduct policy impact assessment of resource recycling and sustainable use of ecosystem services. [NEW]
- Elaborate environmental impact assessment modules including resource use and associated impacts, and develop spatial analysis tools using GIS for this purpose. (To be conducted in the courses of IIASA's young researchers training program (projected).) [NEW]
- Develop capacity to use bottom-up energy models through joint research project with IIASA on integrating water into IIASA's bottom-up energy model (MESSAGE model). [NEW]
- Two working papers on the water-energy model and CGE based policy impact assessment tools.

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

This component aims to reveal policy implications of burden-sharing relevant to embodied emissions, based on the estimated emissions embodied in trade. Policy analysis on border adjustment

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<sup>9</sup> This component is a part of the integrative research component on MRV-related capacity development conducted by Programme Management Office (PMO).

measures is one of the study topics addressed in FY2011. Main activities in FY2012 under this component include:

- Conduct research on implications of economic development and carbon emission considering embodied emissions, funded by Grant-in-Aid for Scientific Research (Japan Society for the Promotion of Science (JSPS)).
- Publish a book on border adjustment measures.
- Policy Brief on implications of burden sharing, to be published in January 2013.

### **Component 3: Green Growth through Economic Instruments and Green Investment\***

This component aims at quantitative impact assessment of green development policies using the integrated policy impact assessment model. The component also aims to contribute to international policy processes related to green economy. Main activities in FY2012 under this component include:

- Start the second phase of two Policy Studies on Environmental Economics (PSEEs) in which we will conduct policy impact assessment of resource recycling and sustainable use of ecosystem services. [NEW]
- Start research on Japanese renewable energy scenarios using the bottom-up energy model. [NEW]
- Contribute to UN Conference on Sustainable Development 2012 (Rio+20) Green Economy process through MOEJ commissioned work.
- Conduct the follow-up study on energy market integration in EAS region funded by ERIA.
- Collaborate with Global Green Growth Institute (GGGI) on green economy issues.

## **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 FY2012, this group will conduct research 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\***

This component has two main objectives. First, it will analyze international environmental cooperation mechanisms in North and Southeast Asia to develop recommendations for strengthening them. Second, it will contribute to specific regional policy processes. Main activities in FY2012:

#### **(1) Study on Environmental Governance in East Asia**

- ISAP session based on the research results condensed in the Fourth IGES White Paper.

#### **(2) Study on Environmental Governance in Northeast Asia** (to be conducted under TEMM in cooperation with research institutes from China and Republic of Korea)

- Conduct joint research on the current status and major challenges of environmental governance in Northeast Asia
- Hold workshop (if funded).

#### **(3) Contribution to specific regional policy processes**

- Contribute to the TEMM process and meetings (in cooperation with the PMO).

## **Component 2: Multilevel Governance\***

### **(1) Research on International Environmental Governance (IEG) and the Institutional Framework for Sustainable Development (IFSD)**

The main objective of this subcomponent is to analyse key issues from a global perspective and make policy recommendations regarding IEG and IFSD, in connection with Rio+20. Note: this work will be conducted in cooperation with PMO, EE and SCP. Main activities in 2012:

- Conduct research on key issues of IEG and IFSD
- Provide policy recommendations to the Ministry of Environment, Japan
- Contribute to IGES position papers relating to Rio+20, including UNEP and UNCSD
- Policy brief relating to IFSD

### **(2) Research on the potential to develop new Millennium Development Goals (MDGs) with strengthened environmental aspects (Sustainable Development Goals (SDGs))**

This subcomponent is part of a larger project to consider how to strengthen the environmental aspect of MDGs in the context of upcoming international discussions on post MDGs and the possibility of establishing SDGs.

Note: this work will be conducted in cooperation with the Tokyo Institute of Technology, UNU-IAS, and the PMO.

- Conduct basic research on international trends in the discussion on MDGs/SDGs, possible effectiveness of potential goals and indicators, and implications of application of basic principles such as common but differentiated responsibility, universality, fairness and balance.
- Contribute to informal working group on SDGs (in cooperation with PMO)

## **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. FY2012 is the fourth year of the research project conducted in collaboration with Kanazawa University and other universities and research institutes. Main activities in FY2012:

- Conduct research focusing on strengthening the regional science-policy interface, and assessing strengths and weaknesses of various options to strengthen the international cooperation framework, focusing on main domestic factors and barriers.
- Continue four country case studies (China, Japan, Republic of Korea and Thailand)
- Organize International Experts Workshop

## **Component 4: Education\***

### **(1) 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 East Asia, and iii) advancing policy dialogues on ESC in the A-P region to secure better regional cooperation. Major activities in FY2012:

**(a) Policy Promotion of Capacity Development for ESC Leadership – in NE Asia:**

- Promotion of Policy options for ESC implementation and dissemination of research findings
- Critical analysis of existing policy dialogues on ESC
- Case study of ESC examples and good policy practice
- Publication of Policy Brief and Journal Article on “ESC implementation strategies”

**(b) Research on Educational Mechanisms to Influence Consumer Behaviour Change and Social Transformation:**

- Research on addressing education's role in strengthening social aspects of sufficiency and its relationship to transformation towards a low-carbon sustainable society.
- Development of good practices and policy instruments from various countries in East Asia and extension of “social sufficiency” model to key consumption areas, including food, energy and waste.
- Publication of Policy Report on “educational mechanisms to strengthen social sufficiency”
- Develop related funding proposal (to be partially linked to the participatory governance component)

**(c) Organising and Coordinating Workshops & Consultation Meetings on ESC:**

- Organize national ESC Expert Roundtable in Japan.
- Coordinate regional ESC networking activities in East Asia – associated with the “Partnership for Education and Research for Responsible Living” (which is a global network on ESC in collaboration with the Marrakech Task Force for ESC, UNEP, UNESCO, EU and the Consumer Citizenship Network)
- Contribute to international ESC fields – especially through cooperation with UNEP-DTIE project on Strengthening Institutional Frameworks for ESC and sub-regional workshops to disseminate project guidelines.

**(2) Monitoring and Evaluation of Education for Sustainable Development in Asia**

As a collaborative research project with UNU-IAS, the purpose of this project is to develop a set of Indicators for ESD that are relevant for use in monitoring and evaluation across the Asia-Pacific region. This will be accomplished through three objectives: i) to conduct research on effective mechanisms for monitoring and evaluation of ESD, ii) to pilot a set of ESD indicators, and iii) to utilise these indicators to conduct M&E of ESD implementation in Asia-Pacific for reporting at the end of “the Decade of ESD” in 2014. Major activities in FY2012:

**(a) Research on effective mechanism for M&E of ESD:**

- Conduct research at national level to distinguish main governmental interventions and capacity-leverage points for strengthening ESD implementation.
- Case study collection on ESD good practices and learning performances to develop a practical framework for strengthening ESD learning outputs.

- Publication of Policy Brief and Journal Article on “Effective Government Interventions for Strengthen ESD learning performance”

**(b) Developing and Piloting of ESD Indicators:**

- Establish a clear set of ESD Indicators
- Test indicators applicability across selected pilot countries.
- Hold reporting and evaluation meeting on usage of ESD Indicators
- Revise and reform ESD Indicators
- Publish a resource manual on conducting appropriate monitoring and evaluation.

**(c) Conduct research on National Statuses of ESD Implementation across Asia-Pacific:**

- Conduct sub-regional research (in selected Asian sub-regions) utilizing the ESD Indicators and M&E framework
- Organize sub-regional ESD reporting meetings
- Publication of Book on ESD Implementation in Asia-Pacific under the framework of the Decade of ESD (2005-2014)
- Publication of Policy Report on Pathways for Improving and Strengthening ESD Practice in the Coming Ten Years

**Component 5: Local Governance\***

The objective of this component is to analyse effective collaboration between local governments and local stakeholders towards sustainable regional development.

**(1) Local level transition for sustainable society**

The study evaluates regional management and urban-rural relationship that can foster transitional energy concept in terms of electricity, heat and transportation fuel in Japan after 3.11, focusing on the role of local governments and networks of individuals and corporations. Activities in FY2012 are:

- Evaluation indicators development for assessment
- Case study of on-going initiatives to collate data needed for assessment
- Consultation with experts and stakeholders on options

**(2) Low carbon development and new market mechanisms at local level<sup>10</sup>**

The study evaluates the mechanisms to promote low-carbon development at local level in selected Asian developing countries using a new market mechanism proposed by Japanese government. Activities in FY2012 are:

- Study of the local, national and international mechanisms to utilise new market mechanisms through local government policies and programmes in Asian developing countries
- Case study of possible demonstration programme in selected local governments
- Capacity development on the necessary local and national institutions conducive to utilisation of new market mechanism

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<sup>10</sup> This component is a part of the integrative research component on new market mechanism coordinated by Programme Management Office (PMO).

### **Component 6: Participatory Environment Decision-Making\***

This component will address the key issues for participatory environmental governance in the Asia Pacific region. The main objective is to improve environmental management through increased public participation in environmental decision-making and sustainable development planning. It will propose a linking of bottom-up participatory approaches and top-down integration of environmental policy with a view to close the so-called persistent gap of implementation in sustainable development. Main activities in FY2012 (if funded) :

- Participate in the Committee on Access to Information which is organised by Ministry of the Environment, as a committee member
- Research on strengthening multi-level and multi-stakeholder governance, improved access to information and decision-making processes, as well as the roles of international and regional institutions (linked to funding proposal on Access to Information and the related activity above)
- Research related to public participation to capacity development (link to funding proposal in the Capacity Development for ESC Component above)

## **3. Stakeholder Cluster**

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

The Kansai Research Centre will conduct research focusing on actions taken by the private sector including business corporations promoting environmental and energy-saving measures. Corporate behaviours will be analysed in collaboration with case study countries and local governments, while environmental and energy-saving technologies of firms will be studied aiming to apply their low-carbon and co-benefit technologies to developing countries. By conducting these activities, the research aims to identify possible barriers and promotional factors to promote sustainable business in Asia, and formulate specific strategies. The following activities will be conducted in FY2012.

### **Component 1: Research for the Application of Low-Carbon Technology in India (ALCT) \***

To promote the application of low-carbon technology in India, IGES, together with The Energy and Resources Institute (TERI), will conduct 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 will be identified in consideration of the needs of GHG reduction technology and the 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 will be conducted to demonstrate feasibility and provide 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 in small to medium-sized businesses (including factories and commercial buildings) with the cooperation of the private sector in the Kansai area of Japan including Panasonic Group, Daikin Corporation, Kyocera Corporation and Osaka Gas, etc. The following research activities will be conducted:

- Study and assess the modification requirements needed when applying the proposed low-carbon technologies to Indian conditions.

- Negotiating with relevant stakeholders from both India and Japan, and launching pilot projects for selected technology(ies)
- Capacity building through workshops/seminars for managers and engineers of Indian companies as well as important and relevant entities including business associations, policy-makers, research communities etc.

### **Component 2: Market-based Instruments for Improving Corporate Carbon Performance in East Asia (MBIs)\***

Focusing on climate change policies using economic instruments (subsidies, taxation, emissions trading, etc.), this component aims to identify the existing gap between current policies and effective and feasible policies in Northeast Asia by analysing the influence of those policies on individual companies: (i) influence on energy efficiency and GHG emissions, and (ii) influence on corporate operations and overall responses of companies to economic climate tools. On that basis, policy recommendations will be developed as a comprehensive policy framework as well as specific measures in cooperation with local researchers. The results from the above mentioned research are expected to be integrated into proposals through existing policy platform, e.g., the Tripartite Environment Ministers Meeting among China, Japan and Korea (TEMM). Major activities in FY2012 are:

- Following the latest discussions and progress of related policies at national and industrial sector levels in the target countries
- Field work using questionnaire surveys and/or giving interviews at the companies to understand their choices to the alternatives of main components of MBIs in discussions
- Preparation of research reports and submission of peer-review journal articles and conference papers
- Organising a mini roundtable meeting of research partners from the study countries

### **Component 3: Local Business Initiative (LBI)\***

The follow-up activities of the “Eco-Home Diagnosis Project” will be implemented in cooperation with local governments and related private sectors. Other research will also be conducted regarding the transfer etc. of emissions reduction mechanisms between small to medium-sized businesses and large-scale companies. This research will include the “CO<sub>2</sub> reduction cooperative project” which will study CO<sub>2</sub> reduction measures etc. in cooperation with private companies such as Kansai Electric Power Company and Osaka Gas in order to develop relevant solution-oriented policies and project schemes, as well as to implement practices. Additionally, possible applications of those policies and business schemes to local governments and private sectors in Asian countries will be studied.

- Field surveys and interviews with private-sector companies and local governments
- Organizing meetings with related sectors

### **Component 4: Co-benefit Technologies (CT)\***

Collect and organise technological information and data regarding co-benefits technologies balancing between environmental and energy-saving measures owned by Japanese businesses. Research will be conducted on applicable technologies and their transfer to developing countries in collaboration with the Ministry of the Environment, Japan (MOEJ). Other research regarding environmental technologies closely linked with “co-benefit technologies” will also be conducted in collaboration with related organisations.

- Literature review and interviews with private-sector companies

- Organizing meetings with related sectors
- Field surveys to study applicable technologies [New]

This component will be conducted in cooperation with Climate Change Group (CC) which mainly focuses on the institutional and political aspects of the research as well as supporting “Asian Co-benefits Partnership” activities.

### **Component 5: Dissemination (DS)**

Kansai Research Centre will disseminate the results of its research activities periodically to policy authorities and industrial sectors, and implement the following activities to obtain feedback from them:

- Organizing international symposia
- Giving presentations of research results at international seminars overseas
- Organizing workshops on location

### **3-2 Kitakyushu Urban Centre**

The main objective of the Kitakyushu Urban Centre (KUC) is promotion of local initiatives toward development of liveable and sustainable cities through 1) promotion of networking opportunities among local governments, as well as with other stakeholders including national governments and agencies, international and regional organisations, donors, academia, research institutions and NGOs, 2) provision of useful knowledge and approaches by objective and cross-cutting analysis of successful case studies and policies, 3) provision of practical solutions and training opportunities to resolve local environmental problems, and 4) mobilising resources and support for that from partner organisations and funding agencies.

### **Component 1: Follow-up of the 3rd High Level Seminar on Environmentally Sustainable Cities**

#### **(1) Expansion of the ASEAN ESC Model Cities Programme**

The 1<sup>st</sup> and 2<sup>nd</sup> High Level Seminar on Environmentally Sustainable Cities (HLS ESC) organised under the framework of the East Asia Summit Environment Ministers Meeting (EAS EMM) inspired and supported the establishment of ASEAN ESC Model Cities Programme, a regional collaborative initiative led by the ASEAN Working Group on ESC (AWGESC) with support from IGES and the ASEAN Secretariat as the programme’s Secretariat. With funding from the Japan-ASEAN Integration Fund (JAIF) and support from partner organisations, the programme extended assistance to 14 cities in 8 ASEAN countries in April 2011. With extended funding from JAIF (*unconfirmed*), the programme plans to expand its activities. (If funded)

#### **(2) Clean Asia Initiative**

The Clean Asia Initiative under the Ministry of the Environment, Japan, has been implemented for the last three years and KUC has contributed in organising the past three High Level Seminars on Environmentally Sustainable Cities (HLS ESC) using the fund. The continuity of the same series of the seminar is not yet decided (as of January 2012). If there is a demand for that, KUC will continue serving as the secretariat linking that to the ASEAN ESC Model Cities programme, which is the output of the seminar. (If funded) In addition, KUC will continue be in charge of the Green City research component under TEMM.

## **Component 2: Low-carbon policy promotion through MRV\*<sup>11</sup>**

### **(1) MRV capacity building for local governments**

This is a continuation of the same project from FY2011. There are demands from some local governments in Asian countries, including Indonesia, Thailand and others, in developing MRV capacities to develop local GHG emissions reduction plan, which is required by the national governments. In order to develop such capacity, KUC provides training opportunities using training modules for some selected cities in cooperation with other groups in IGES (CC, MM, and FC). In line with that, KUC will undertake a three-week training programme on MRV capacity building for selected Asian countries at JICA Kyushu in September 2012. Organising a session on MRV capacity building for local governments is planned at ISAP 2012.

### **(2) Study on measures to promote low-carbon districts**

This is the second year of a three-year research project (Global Environment Research Fund (MOEJ) E-1105) headed by Nagoya University. As the main tasks and the corresponding staff were transferred to PMO in the middle of FY2011, KUC is now only partly involved, studying Kitakyushu City's low-carbon city development plan. (Fund by MOEJ)

## **Component 3: Promotion of Composting and local initiatives in Asian cities\***

### **(1) Research on large-scale composting projects**

This ADB-funded study examines both successful and unsuccessful large-scale composting programmes in six Asian countries, including India, Sri Lanka, Bangladesh, Thailand, Indonesia and China, to identify recommendable policies for promoting composting as a green business. The outputs of the study will be a guideline for national and local policy-makers to implement composting projects successfully with technical and financial options in view of applying for ADB-funded solid waste management projects. (Fund by ADB)

### **(2) Promotion of decentralised composting**

Following the past achievements under the Kitakyushu Initiative, the expansion of a successful decentralised, community-based, participatory composting model in Surabaya, Indonesia will be further promoted in Asian Cities in cooperation with Kitakyushu City, Kitakyushu International Techno-cooperative Association (KITA), JICA, ESCAP and other organisations. Main activities include supporting KITA in the implementation of an ongoing project in Cebu, Philippines, development of a new project in Sri Lanka in cooperation with ESCAP, supporting Kitakyushu City in implementing JICA technical assistance project on solid waste management in Indonesia, and others. (Fund by JICA, Kitakyushu City, others)

## **Component 4: 3R strategy development in Malaysia\***

An MOEJ-funded research project on organic waste management strategy development in Malaysia has been ongoing for the last two years in cooperation with SCP, but which ends in FY2012. In line with that, applicable policies are recommended for the identified organic (or food) waste generation sectors and some pilot projects are being implemented in selected cities. In addition, in order to tackle with other types of solid waste, particularly biomass and plastics, other technical options and the necessary policy framework will be recommended in line with development of further research

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<sup>11</sup> This component is a part of the integrative research component on MRV-related capacity development conducted by Programme Management Office (PMO).

projects. (Fund by MOEJ; other funds being explored)

### **Component 5: Community development studies and training [New]**

In close collaboration with the Graduate School for International Development and Cooperation (IDEC), Hiroshima University, and other private research companies specialised in community development, a half-semester lecture course (once a week over four months) was developed at Hiroshima University to be started in April 2012. KUC serves as the course coordinator and provides objective analysis for each case study. The contents will be compiled in view of developing a training course with JICA in next fiscal year. (Funded by Hiroshima Univ.)

### **Component 6: JICA-related projects [New]**

Since last year, JICA has adopted a policy to shift its focus on collaboration with local partners particularly for the JICA Regional Offices. In line with that, JICA Kyushu has started strengthening the partnership with Kitakyushu City, KITA and IGES/KUC. In response, KUC has proposed some training programmes using JICA schemes and some of them were approved as given below:

[KUC's roles] (Fund by JICA Kyushu):

- Community-based composting workshop (a post-Kitakyushu Initiative networking activity), three days, July 2012 [Coordinator]
- Training course on composting and community development, three weeks, Aug. – Sep. 2012 [Coordinator]
- Training course on MRV capacity development, three weeks, Sep. 2012 [Coordinator]
- Training course on low-carbon city planning and technologies, four weeks, Sep. – Oct. 2012 [Presentation]
- Training course on sewerage management, Nov. 2012 [Presentation]
- Training course on solid waste management, Aug. 2012 [Presentation]
- Pre-training for Japan Overseas Cooperation Volunteers, Dec. 2012 and Mar. 2013 [Presentation]
- Grassroots project on charcoal production using biomass in Yame City, (Kyushu Institute of Technology), 2012-2014 [Development of a training programme based on the same project]

### **Component 7: Other Kitakyushu collaboration projects**

In line with Kitakyushu City's international environmental cooperation policy, KUC supports the implementation of the following projects:

- OECD's Green City Programme [Kitakyushu City Commissioned Work]
- Solid waste management project in Nairobi, Kenya [JICA Technical Cooperation Project]
- BOP business project in Wuxi, China (if funded)
- Coordinating delegates from China and other countries in Kitakyushu for business promotion on request basis

## **3-3 Regional Centre**

The goal of the Regional Centre in Bangkok is to build and strengthen IGES's partnership with international organisations, especially those having regional offices in Bangkok. The Regional Centre has been expanding its activities since it was established in FY2003 as the former programme office (Bangkok Office) within the Asian Institute of Technology (AIT). In FY2011, the Regional

Centre started its operations from its new location in Bangkok city with the official organisational status (a regional overseas office of IGES) attained in Thailand. The Regional Centre continues to strengthen the three main networks that IGES provides secretariat services for, as well as engaging in other regional activities.

### **Component 1: Network for Integrated Planning and Sustainable Development Strategies in Asia-Pacific Region (SDplanNet-Asia&Pacific)**<sup>12</sup>

IGES has been coordinating SDplanNet-Asia&Pacific since 2008 with initial financial support from the International Institute for Sustainable Development (IISD) for the period 2008-2010. In FY2011, a new discussion group was opened on the professional web portal, LinkedIn. Discussions have commenced with the new United Nations Office of Sustainable Development (UNOSD), recently opened in the Republic of Korea, for possible official and financial support. In 2012, the Regional Office will implement the following:

- Continue to publish newsletters and update website contents to actively engage in member practitioners of sustainable development.
- Support the Thai national charter, according to member needs.
- Continue conducting discussions on fund raising and potential collaboration with UNOSD.

### **Component 2: Support for Asian Environmental Compliance and Enforcement Network (AECEN)**<sup>13</sup>

IGES was selected as the permanent secretariat for AECEN in 2009 and will fully take over duties from March 2012. In FY2011, IGES initiated the EIA Clearing House project with ADB as an AECEN activity. In FY2012, the Regional Centre will continue strengthening the network and implement the following activities:

- Fully take over and maintain the secretariat functions of the network.
- Establish and maintain an EIA Clearing House in collaboration with ADB, including compiling a compendium of good EIA practices.
- Implement two EIA twinning projects (China-Sri Lanka and China-Lao PDR) when agreement with China is finalized.
- Conduct an annual forum and/or capacity strengthening event for member agencies.
- Conduct fund raising.

### **Component 3: Asia Pacific Adaptation Network (APAN)**<sup>14</sup>

Since 2010 IGES has been co-hosting the Regional Hub for the network with the Asian Institute of

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<sup>12</sup> SDplanNet-Asia&Pacific is a network of sustainable development practitioners that conducts outreach activities such as virtual on-line workshops and publication of a newsletter on trends and progress in sustainable development practice.

<sup>13</sup> AECEN is a network of 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 operates primarily by twinning countries through South-South cooperation to share good practices and to assist each other in capacity building. AECEN is also strengthening the capacity of environmental courts and the judiciary responsible for environmental cases throughout Asia.

<sup>14</sup> 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.

Technology-Regional Resource Centre for Asia and the Pacific (AIT-RRC.AP) in close collaboration with UNEP-Regional Office for Asia and the Pacific (ROAP). In FY2011, APAN completed its inception phase (2009-2011) and prepared the implementation plan for its Development Phase (2012-2014). In FY2012, the Regional Centre will continue strengthening the network and will implement the following major activities:

- Strengthen Regional Hub function
- Convene regional forum and sub-regional/thematic conferences
- Strengthen knowledge management/sharing function
- Synthesise findings

#### **Component 4: Support for UNEP Fifth Global Environmental Outlook (GEO5)**

IGES is a longstanding collaborating centre for UNEP's Global Environment Outlook series. In FY2011 IGES staff were fully engaged in preparation of GEO5 and the Regional Centre organised regional authors meetings, completed drafting process for the regional chapter and contributed to the summary for policy makers (SPM). In FY2012, the Regional Centre will assist with intergovernmental negotiation of SPM and finalise the chapter on the Asia-Pacific region in time for Rio+20.

#### **Component 5: Support to Asia Climate Change Adaptation Project Preparation Facility (ADAPT-Asia)<sup>15</sup> [New]**

In FY2011, the Regional Centre was awarded a subcontract under this five-year project funded by the U.S. Agency for International Development (USAID). The Regional Centre is responsible for two components: (i) establishing a regional knowledge sharing platform and (ii) organising the ADAPT-Asia Annual Forum. In FY2011, the Regional Centre launched the basic project website and organised the first annual forum in Bangkok. In FY2012, the Regional Centre will implement the following:

- Design, develop, and maintain the project website and establish link with APAN website.
- Convene an annual forum and develop communication and media strategies to strengthen the project's outreach.

#### **Component 6: Support for IGES' Activities in Bangkok and Coordination with UN Organisations Stationed in Bangkok**

The Regional Centre has maintained close collaboration with multilateral and bilateral organisations such as UNESCAP, UNEP-ROAP, World Bank, UNDP, ADB, USAID and government offices and research institutes located in Bangkok and other cities in Southeast Asia to provide a wide range of support to IGES's research project activities in the same area. The Regional Centre also helped identify potential project opportunities being developed by funding agencies located in Bangkok and provides strategic advice on marketing IGES services, including International Labour Organization (ILO) Regional Office for Asia and the Pacific. The Regional Centre will continue strengthening the network in liaison with existing partner institutes and by forging new partnerships.

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<sup>15</sup> ADAPT-Asia aims to strengthen human and institutional capacity to prepare quality climate change adaptation investment proposals, accelerate and ensure sustained access to financial resources for climate change adaptation investment projects, and strengthen and sustain a regional knowledge platform to share and replicate best practices in 13 countries in South, Southeast, and Northeast Asia.

### **3-4 Beijing Office**

The purpose of the Beijing Office is to act as an important bridge and a reliable platform between China and Japan to further promote environmental bilateral cooperation between the two countries. For this purpose, the following activities will be conducted in FY2012.

#### **Component 1: Sino-Japan Water Environment Partnership**

This research has been implemented in China as part of the cooperation scheme of a project based on an agreement between the Japanese and Chinese governments. Beijing Office analyses the issues of the current policy framework on water pollutant reduction and water environment management, and prepares the policy recommendations for important water areas such as drinking water sources, where more strategic and comprehensive management is needed in light of their rapid development.

In FY2012, Beijing Office will implement a model project on the total pollution reduction of the rural area in Weihai city, Shandong Province, China.

#### **Component 2: Climate Change Capacity Building Project in China**

This research is to be carried out in close coordination with the Climate Change Group (Market Mechanism Sub-group). (Fund to be confirmed after March 2012)

- Sino-Japan joint training and capacity building for some model provinces and cities in China in order to increase their levels of capacity for climate change.
- Sino-Japan joint research on the carbon market for building up China's market.

#### **Component 3: Participation in Sino-Japan Joint Survey Research in the Environmental Field**

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

- Sino-Japan co-benefit model project
- Sino-Japan joint research on total emission reduction of nitrogen oxide in air
- Sino-Japan joint research on the pollution reduction of heavy metals in the environment, etc.

#### **Component 4: Support for IGES' Activities to be carried out in China**

Beijing Office will support each group or centre of IGES by providing important policy information etc. from China.

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

The PMO will continue to work on the cross-cutting issues, being actively involved in a number of political initiatives in the Asia-Pacific region as well as worldwide. It also designs and coordinates IGES-wide strategic activities including the International Forum for Sustainable Asia and the Pacific (ISAP), White Papers, IGES Strategic Fund, external fundraising and promotion of internal quality management system to produce better quality research outputs.

### **4-1 IGES White Paper**

The IGES White Paper is a flagship publication for IGES as an international research organisation

which delivers key messages on timely and strategic topics in the Asia and the Pacific region to contribute to important regional and international processes.

The Fourth IGES White Paper is scheduled to be launched in the summer of 2012, under a working title of “Greening Governance in Asia-Pacific”, which is linked with the dual themes of the UN Conference on Sustainable Development 2012 (Rio+20). IGES utilised preliminary findings and outputs produced in the course of the White Paper’s development within FY2011 and made inputs into relevant regional and international processes such as GEO5 and the preparatory commissions and review processes for Rio+20.

In FY2012 the White Paper IV will go through post-production processes, starting with editing and translation which will end by May, and the executive summary will be prepared by the time of Rio+20. The whole document will be published and launched at ISAP2012 where it will serve as a major focal point for the discussions on the outcomes of Rio+20 and the future direction of sustainable development governance in Asia-Pacific.

#### **4-2 International Forum for Sustainable Asia and the Pacific (ISAP)**

The goal of ISAP is 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 experts and related organisations, on the basis of the global networks and research results that IGES has developed so far. ISAP aims to develop innovative and strategic policy discussions towards a sustainable Asia and the Pacific. By holding ISAP once a year with timely themes, IGES intends to nurture its convening and disseminating power in the long run.

ISAP 2012 will be held on 24-25 July in Yokohama, Japan, at the Pacifico Yokohama in collaboration with United Nations University - Institute of Advanced Studies (UNU-IAS). ISAP 2012, with the main themes of “Beyond Rio+20”, and will review the results of Rio+20 as well as discuss important agenda including climate change, green economy, resilience, sustainable development goals and biodiversity.

ISAP 2012 will have the following specific objectives:

- Provide a forum for discussions on post Rio+20 themes as they relate to regional issues and to promote inputs to relevant regional and international process
- Offer a platform for multiple stakeholders to interact while sharing unique perspectives on the important agenda topics in the region under the above themes of ISAP2012 (including local governments; business; other civil society groups and students) ;
- Support collaboration among IGES groups with constructive discussions and knowledge sharing based on the strategic themes.

ISAP 2012 will consist of three major components: Open Sessions, Expert Workshops and Network Meetings. The Open Sessions will have Plenary Sessions (Opening and Closing Sessions as well as Thematic Sessions) and Parallel Sessions. Special Lunch Sessions, Interactive Sessions (a series of dialogues with invited speakers), and a Special Session focussing on young researchers and students is also planned.

#### **4-3 Promotion of Clean Asia Initiative (CAI)**

The overall goal of the operation is to contribute to the establishment and elaboration of effective international environmental cooperation mechanisms, in particular, in East Asia. Promotion of CAI is to support MOEJ activities of international environmental cooperation. IGES will collect and analyse information and data related to environmental cooperation through networking and basic research from relevant governments, international organisations and the research community. Based on this knowledge, IGES aims to contribute to the important inter-governmental policy process in

the region. In FY2011, this operation plans to implement the following activities in two components for further promoting environmental cooperation in East Asia.

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

This component aims to promote environmental cooperation activities undertaken by MOEJ under the umbrella of CAI.

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

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

IGES is expected to provide the priority intergovernmental policy processes with substantive inputs through this operation. Key environmental meetings envisaged as the target policy processes include, but are not limited to:

- East Asian Summit Environmental Ministers' Meeting (EAS-EMM) and its Preparatory Meeting.
- ASEAN+3 Environmental Ministers' Meeting (ASEAN+3 EMM) and its Preparatory Meeting.
- Japan ASEAN Environmental Policy Dialogue and its Preparatory Meeting.
- Tripartite Environmental Ministers Meeting among China, Japan and Korea (TEMM) and its Preparatory Meeting.
- Senior Officials Meeting of The North-East Asia Subregional Programme for Environmental Cooperation

#### **4-4 Monitoring, Evaluation and Advisory Activities on Indonesia Climate Change Policies**

The overall objective of the activities is to monitor Climate Change Policies of the Government of Indonesia (hereinafter GOI) and conduct overall evaluation on series of Indonesia Climate Change Program Loans (ICCPL). These activities also aim to contribute to further strengthening the climate policy of GOI, as well as to providing policy recommendations for the Government of Japan (hereinafter GOJ). The specific objectives of the activities are below:

- Monitoring and evaluation of GOI's Climate Change Policies (written in the "Policy Matrix" agreed by both governments)
- To conduct overall evaluation of ICCPL phase II (2010-2012)
- To provide recommendations to GOI for further strengthening its capacity to respond to Climate Change issues (measures for further actions, improvement for the mid- and long-term effects of implemented actions, and important policies beyond Policy Matrix)
- To provide recommendations to GOJ for effective support to developing countries' Climate Change policies. The recommendations include additional support option.

IGES will also produce two reports: a Monitoring Report and a Programme Evaluation Report on ICCPL Phase II.

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

In order to actively contribute to the preparatory and follow-up processes for and after the UN Conference on Sustainable Development (Rio+20), IGES has been mainly conducting three activities: (i) information collection and analysis on the preparatory and follow-up processes for and after Rio+20; (ii) deepening discussions on key discussion points such as Sustainable Development Goals (SDGs) and two themes of Rio+20, “green economy in the context of sustainable development and poverty eradication” and “institutional framework for sustainable development”, and establishing effective outreach regarding these matters; and (iii) contribution to the intergovernmental preparatory and follow-up processes for and after Rio+20. To effectively address and make the utmost impacts through these cross-cutting processes, PMO is engaged in all-IGES coordination of the relevant activities such as:

##### **(1) Information collection and analysis for the preparatory and follow-up processes for and after Rio+20,**

- UN processes: Preparatory Committee Meetings/Informal Intercessional Meetings of Rio+20; Rio+20 and its Side Events, Regular sessions of UN Commission on Sustainable Development (CSD); UNEP Governing Council/Global Ministerial Environmental Forum; and UNEP Global Environmental Outlook 5 (GEO5) preparation process etc.
- Others: Japan National Preparatory Committee, and Major Groups related meetings etc.

##### **(2) Deepening discussions on key discussion points and two themes of Rio+20**

- Organising internal meetings for information sharing
- Sending out key messages through Rio+20 side events
- Deepening a discussion using occasions such as ISAP2012
- Sending out fundamental messages through IGES key publications such as IGES White Paper IV

##### **(3) Contributing to the intergovernmental preparatory and follow-up processes for and after Rio+20**

- Contribution to intergovernmental preparatory and follow-up processes for Rio+20 by conducting the MOEJ commissioned work entitled “Establishing and Operating National Preparatory Committee for Rio+20.”

#### **4-6 Promotion of efficient energy use (harmonisation of energy-conservation policies and clean energy systems) post-disaster toward low-carbon community scenarios **【NEW】** \***

Based on activities thus far to gather and analyse information, with survey of local governmental region on ways to implement energy measures from a community level in the aftermath of the Great East Japan earthquake, we will conduct policy research to contribute to the realisation of a “Community energy renaissance” (study, selection and implementation of modifications in lifestyle and working-style, with regard to energy supply and consumption suited to the community). In FY2012, research will be conducted under the following components:

## **(1) Methodology Development and Structure for MRV (Measuring, Reporting and Verification) in Energy Technology Policy Region<sup>16</sup> [NEW]**

- We will study capacity building of bottom-up MRV approach from the appliances/buildings (residential and commercial) level up to the city block level, looking at the energy technology policy region, and work to create models for low-carbon technology scenarios.
- We will analyze and evaluate efficiency standards in civilian residential sectors and commercial operations as well as policies and schemes to manage technology transfer for a low-carbon society both in Japan and overseas. In particular, for the evaluation of low-carbon capital (comprehensive concept of a low-carbon standards with socio-economic and environmental load-minimization), we are including policy impact analysis of non-energy benefits inclusive of human capital (environmental education and enlightenment education) and natural capital (forestation and preservation of *satoyama*).
- The above research will be implemented through basic surveys targeting Japan's cutting edge technology, adaptability studies in Asia (China etc.) as well as holding investigative review meetings and scenario workshops.

## **(2) Research on regional development measures for low-carbon city block herd formation**

- We will study effective social- economic and energy-efficient system frameworks for city block herd formation, as well as look at anticipated environment-related policies and technological innovations. We will also analyze and evaluate applicable conditions, with the aim of packaging policies so they can be transferred to other regions such as Asia.
- We will classify measures that have been implemented in progressive urban model projects and urban spatial planning, and systematize necessary socio-economic conditions in low-carbon urban blocks, subsystems created in urban blocks and individual element technology which creates each system beyond a smart-community.
- We will investigate existing conditions and administrative resources in urban and rural areas which are development targets for model blocks, and study characteristics of insufficient conditions that throw light on the necessary conditions for implementation of low-carbon urban blocks, as well as looking at regional development through policy alternatives including strengthening social aspects connecting businesses and local people within the community. (Global Environment Research Fund (MOEJ))

### **4-7 Overall Coordination on Institutional Design of an MRV System in Asia\***

Since FY2011, IGES has been implementing a cross-cutting operation entitled 'Institutional Design of an MRV (Measurement, Reporting and Verification) System in Asia' commissioned by the Ministry of the Environment of Japan. A number of IGES research groups, such as, but not limited to CC, MM and NRM, are participating in the operation. Understanding the importance and necessity to best utilise IGES-wide expertise for effective implementation of this operation, PMO will enhance its overall coordination function in FY 2012. The coordination will be made paying attention to inter-group knowledge and information sharing on such issues as the following, as well as envisaging IGES-wide contributions to the emerging negotiation process of Durban Platform for Enhanced Action as the consequences of UNFCCC-COP17/CMP7.

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<sup>16</sup> This component is a part of the integrative research component on MRV-related capacity development conducted by Programme Management Office (PMO).

- Analytical views on the governance regarding climate change policy in selected Asian countries
- Trends of various NAMA/MRV relevant actions at national, municipal and project levels (including institutional design and implementation barriers)

#### **4-8 Action Research on Effective Decontamination Operations with due regard to Local Conditions in Fukushima 【NEW】 \***

IGES will launch an ‘Action Research on Effective Decontamination Operations with due regard to Local Conditions in Fukushima’ from FY2012 to FY2014 receiving a competitive research grant from the Ministry of the Environment of Japan. In Fukushima prefecture and nearby regions, having a wide range of stakeholders namely the central government, prefectural governments, a number of local governments (city, town and villages) and local communities involved, decontamination/remediation operations are accelerating; while challenges remain, such as development of decontamination strategies/local plans, implementation, securing workers’ safety, public participation and information-sharing. Aiming at providing substantive inputs to the ongoing decontamination/remediation operations, reflecting the realities of local conditions for effective designing and implementation, IGES will conduct action research consisting of three research components with the participation of experts from Fukushima University, other experts involved in the Fukushima’s recovery processes, and selected international experts familiar with decontamination/remediation operations in Europe with their previous experiences with Chernobyl.

##### **(1) Governance for Effective Remediation/Decontamination Operations**

- Provision of recommendations based on the analyses on gaps in information exchange, financial flow, roles and responsibilities, etc. among key stakeholders including the central government, prefectural governments, local governments (city, town and villages) and local communities
- Identification of capacity development needs for effective remediation/decontamination governance

##### **(2) Development of remediation/decontamination strategies reflecting the local conditions**

- Development of a Japan optimal model (decision support system) based on the existing European model for developing and/or elaborating local remediation/decontamination strategies to attain the residents’ long-term additional radiation dose level lower than 1mSv/year.

##### **(3) Effective communications to promote collaboration with those affected in contaminated areas**

- Development of an appropriate risk-communication methodology to build and enhance mutual trust among stakeholders, in particular those of local residents and communities, to central and prefectural governments, through which mutual understanding and consensus should be achieved.

## **II Strategies for External Fund-Raising**

### **1. Overall**

Taking into account the increasing mid-term/long-term risks of 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 crisis, the financial situation of IGES' strategic research is becoming more uncertain. On the other hand, there is continuing demand in Asia for strategic research on global environmental problems. Thus, the acquisition of external funds for conducting such strategic projects has become more indispensable than ever for IGES. IGES will explore appropriate funding resources actively and selectively, for securing research funds, taking into account the research plan and researchers' capacity.

IGES aims to develop such activities in a more active and strategic manner, based on previous experience, and keeping in mind the basic approach below.

#### Basic Approach

IGES will

- (i) Ensure funds for research activities, fully taking into account IGES's Integrative Strategic Research Programme as well as considering its 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**

### **2-1 Projects from Governmental Agencies**

Projects from 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. Taking into account consistency between the projects and IGES research, IGES aims to obtain projects from other governmental agencies in Japan such as the Ministry of Economy, Trade and Industry (METI), Ministry of Agriculture, Forestry and Fisheries (MAFF) and the Prime Minister's Office (PMO), as well as to develop collaborative research projects with JICA and ADB.

### **2-2 Research Grants from Governmental Institutes**

IGES has submitted applications to the Global Environment Research Fund (MOEJ) and the Grants-in-Aid for Scientific Research (MEXT: Ministry of Education, Culture, Sports, Science and Technology), and was 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. However, IGES sometimes faces difficulties in submitting proposals with limited human resources. It is important to actively collaborate with IGES's partner institutes and other external experts to apply for these research grants. When receiving a request for collaborative research from other research institutes, IGES will examine the possibility of joining the project in a flexible and forthcoming manner, taking into account the research linkage.

### **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 will continue to apply for funds positively,

using IGES's close cooperation with research organisations within and outside of Japan as its main selling point. However, it is necessary to carefully choose relevant research funding sources, since most of the research grant schemes do not cover personnel costs.

#### **2-4 External Fund Raising Outside of Japan**

Whilst continuing to make efforts to secure research funds from international agencies, IGES will also explore funds from the US and EU. In particular, IGES will try to develop research projects in cooperation with ADB which signed an MOU with IGES last year. IGES will also try to get funding from new financial resources including the seventh framework programme (FP-7) of EU which has been financially linked with the Japan and Science Technology Agency (JST) since last year in collaboration with the experienced institutes such as SEI and TEI.

By way of information exchanges with major research institutes and international agencies, needs assessments in Asia, and building up trusted relationships through timely inputs of research outcomes, IGES intends to expand its international collaboration. In addition, in order to increase the possibility of obtaining external funds, IGES will actively participate in research activities which will lead to further development and extend IGES's regional and international networks.

### **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 will explore 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.

### **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 will extend CB activities selectively, in line with the basic direction of the Fifth Phase research.

## **III. Information Dissemination and Outreach**

IGES will use various media to introduce its research outputs comprehensively to various stakeholders so that they can be applied to environmental policy-making and activities related to environmental issues in the Asia-Pacific region. IGES will also extensively collect and disseminate 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 FY2012, the final year of the Fifth Phase research, it is expected that one or two Policy Briefs will be published from each project.

### **2. Information Dissemination through Publications and Periodicals**

IGES will continue to publish periodicals, such as "What's New from IGES" (newsletter), and the "Annual Report" in order to put out information collected through its research activities or by using its research networks. At the same time, IGES will put more efforts on effective information

dissemination, aiming to further increase its visibility in and out of Japan.

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

We aim to enrich the role of the IGES website as a portal for collecting and providing information on events and environmental information in the dynamic Asia-Pacific region by providing timely access to information regarding research outputs (including strategic research and policy advice); by hosting the various databases managed by IGES; and by introducing the international and regional initiatives and activities in which IGES takes part. Effective tools to support this include:

- “IGES EnviroScope”, the environmental information site of IGES, which introduces IGES publications as its research output database
- The e-mail news “E-alert” to provide the latest trends and outputs of the research in a timely manner
- “Monthly Asian Focus: Observations on Sustainability” (starting from January 2011), a series of interviews with the foremost experts in their fields.

### **4. Providing Opportunities for Policy Discussion**

IGES will organise ISAP as an all-IGES event to stimulate policy discussions with key stakeholders, both domestic and international. IGES will also organise several side events with timely themes at various international conferences such as UNFCCC COP18, and will hold a variety of meetings as the secretariat or the focal point of international networks such as Asian Environmental Compliance and Enforcement Network (AECEN), Asia Pacific Adaptation Network (APAN), Asia-Europe Environment Forum (ENVForum), Regional 3R Forum in Asia, International Research Network for Low Carbon Societies (LCS-RNet), and Asian Co-benefits Partnership (APC). Through these activities, IGES will provide opportunities for discussion amongst governments, businesses, NGOs/NPOs and researchers, thereby promoting policy formation for the realisation of a sustainable society.

### **5. Contribution to Local Communities**

In order to disseminate research activities and results, IGES will conduct outreach activities for local residents and businesses in cooperation with local governments and other concerned organisations.

- Holding a series of “Global Environment Seminars” aiming to present the results of IGES research activities
- Co-organizing “Shonan Academia” with Kanagawa International Foundation
- Participating in the “Shonan Village Festival” hosted by Village Shonan, Inc.
- Co-organizing seminars and symposia on environmental issues with Kanagawa Prefecture and Hyogo Prefecture
- Cooperation with events held by Kanagawa Prefecture, Hyogo Prefecture and Kitakyushu City

## **IV. Other Activities**

### **1. Capability Building of Research Staff and Promotion of Researcher Exchange**

In an effort to promote mutual exchanges among the research projects and enhance the capacity of research staff, “In-house Seminars” will be held as needed. Furthermore, in order to build networks with major environmental research institutes and universities in various countries, IGES will

dispatch its researchers to those organisations and/or accept researchers from them.

## **2. Enhancing the IGES Affiliate Member System**

IGES will make continued efforts to promote the affiliate member system in order to reflect the various opinions of governments, private companies, NGOs/NPOs and citizens in IGES research activities as well as to establish a strong financial base for the institute. In order to increase membership, services for affiliate members will be further improved by appropriate incentives such as preferentially inviting them to various symposia and seminars and providing them with various IGES publications.

## **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 will implement the following components and will offer its support to the other relevant sections of IGES and other organisations.

#### **1-1 IPCC Emission Factor Database (EFDB)**

This component aims to maintain and improve a database of emission factors and other parameters for development of national GHG inventories where national experts can find nationally appropriate values that are specific to their national circumstances to supplement the IPCC inventory guidelines. In FY2012, the following activities will be implemented:

- Research and identification of potential data for approval by Editorial Board
- Support of data management and data approval process
- Organization of two data collection meetings on specific topics
- Organization of the tenth meeting of the EFDB Editorial Board

#### **1-2 International Expert Meetings on Greenhouse Gas Inventories**

This component aims 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 are areas and issues that have caused inventory compilers difficulties and are identified by the Bureau of the TFI. In FY2012, the following activities will be implemented:

- Organization of an expert workshop on use of the 2006 IPCC Guidelines in Japan
- Organization of an expert meeting on sampling and uncertainties in forest estimates
- Organization of a meeting to examine the need for supplementary guidance as requested by the UNFCCC CMP7 in Durban, December 2011
- Organization of a meeting to follow up the outcome of the meeting on the supplementary guidance mentioned above.
- Holding the 24<sup>th</sup> meeting of the Bureau of the TFI

- Publication and dissemination of results of earlier meetings.

### **1-3 Additional Guidance on Wetlands to Supplement the 2006 IPCC Guidelines**

The UNFCCC has invited IPCC to prepare additional guidance on Wetland Emission Inventories to supplement the 2006 IPCC Guidelines, focusing on rewetting of peatlands and wetland restoration. The TSU has already started this work last year and plans to finish in 2013. There will be at least three meetings in FY2012:

- A science meeting to review the overall approach and any cross-cutting issues.
- Two Lead Author meetings and two reviews by international experts and governments.

### **1-4 Software for the 2006 IPCC Guidelines for National Greenhouse Gas Inventories**

This component aims to implement the default methods in the 2006 IPCC Guidelines in an easy-to-use software package. In FY2012, the following activities will be implemented in order to complete the software:

- The initial version of the software should be finished
- Launch of and publicity about new software
- Development of a long-term management and support plan

## **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 is planning to conduct the following activities in FY2012:

### **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)**

APN will support international research projects selected by the 17th 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 supports capacity building activities for young, aspiring scientists and joint research activities of leading scientists in developing countries. APN will also continue its support towards activities related to “Reduced Emission from Deforestation and Forest Degradation (REDD)” and “Sustainable use of material, including trans-boundary waste, etc.”

### **2-2 Inter-Governmental Meeting and Other Meetings**

APN will conduct the 18th Inter-Governmental Meeting (IGM) and the Scientific Planning Group (SPG) Meeting (country of venue: not yet decided).

### **2-3 Others**

#### **(1) International Symposium**

APN will co-organise an international symposium/workshop with Hyogo Prefectural Government on

such themes as introducing the newest results of APN or IPCC of the joint research on global warming in the Asia-Pacific region.

### **(2) Publication of a scientific book entitled “Climate in Asia and the Pacific: Security, Society and Sustainability”**

APN will summarise and synthesise the results of ‘climate’- related collaborative projects that were supported by APN over more than ten years. APN will publish a scientific book entitled “Climate in Asia and the Pacific: Security, Society and Sustainability”, on time with the release of the IPCC-5<sup>th</sup> Assessment Report, in 2013.

### **(3) Climate Change Adaptation and Low Carbon Development/Low Carbon Societies**

APN secretariat is considering to enhance activities with regard to Climate Change Adaptation and Low Carbon Development based on the results of UNFCCC/COP17 to be approved by 17<sup>th</sup> IGM/SPG held in March 2012 in Jakarta.

## **3. Activities of the Japanese Center for International Studies in Ecology (JISE)**

Aiming to realise a sustainable society through ecological study, JISE conducts practical research into the restoration and creation of ecosystems from the regional to global level; JISE also offers environmental training programmes, and collects and provides environmental information. JISE will implement the following activities in FY 2012:

### **3-1 Research Projects**

JISE will promote practical research projects regarding environmental conservation and restoration based on ecological study, which include “Restoring Tropical Forests (Malaysia and Kenya)”, “Actual and Potential Natural Vegetation in Asia and the Pacific (Thailand and West Japan)”, “Vegetation Science Research Related to Conservation of Biodiversity” (Kinki and Tohoku regions of Japan)” and “Structure and Dynamics of Regional Ecosystems including their Evaluation” (Japan and overseas). In particular, 2012 sees JISE pushing ahead with multilateral and intensive research and projects on nature and forest restoration in the coastal regions of northern Kanto and Tohoku which were hit by the Great East Japan earthquake in March 2011.

Furthermore, JISE takes part in the Local Forest (Meguri-no-Mori Forest) Development Council located in Shonan International Village (Kanagawa Prefecture) and continues to direct tree planting.

Based on the above research, JISE makes proactive social contributions in partnership with other institutes by promotion of replanting disaster-prevention and environmental-preservation forests, which contribute to global climate change policy, conservation of biodiversity, disaster prevention in mountainous and coastal regions, and restoration of forests for water source conservation; as well as support to keep secured local livelihoods by prevention of earthquake, fire, and tsunami damage to urban and industrial regions.

### **3-2 Capacity Building**

By collaborating with organisations such as JICA, JISE will carry out ecological training (basic, intermediate and advanced levels) targeting the staff of businesses, public organisations and government offices that are currently planning or implementing environmental restoration projects, with the ultimate goal of establishing forests for environmental conservation. In addition, JISE will implement capacity building projects aimed at the general public, such as forest creation, to contribute to the recovery and protection of the environment.

### **3-3 Interaction**

Based on partnership with institutions such as Yokohama National University, JISE will unveil its database of information regarding phytosociological data (composition, structure and vegetation units). Also, JISE will hold outreach events, such as the JISE Environmental Forum, targeting the general public.

### **3-4 Dissemination and Public Awareness**

JISE disseminates news of its activities through its public relations report (the “JISE Newsletter”) which introduces its own activities as well as the efforts of private companies in environmental conservation. JISE also publishes “Eco-Habitat: JISE research”, a bulletin containing its research results, which will be available online. It also plans and implements numerous tours to carry out forest restoration overseas, such as the Kenya Eco-tour (to take place in April).