

The Business Plan for FY 2014
Institute for Global Environmental Strategies

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The Business Plan for FY 2014

Institute for Global Environmental Strategies (Draft)

Executive Summary

1. Basic Directions

- (1) The Integrative Strategic Research Programme of IGES for the Sixth Phase will be further promoted, with all the major initiatives envisaged being gradually put into practice in FY2014. During the Sixth Phase, IGES intends to become a “Agent of Change” in promoting the global transition towards a sustainable society, as stated in the Programme for the Sixth Phase.
- (2) At the same time, flexible management will be conducted by fully adapting IGES to the new business environment that is emerging both inside and outside Japan. In this way, IGES will always remain a relevant agent of change for the future.
- (3) Given the above, high priorities will be placed on several key activities, as elaborated below. As most of the priority activities require collaboration among different groups, inter-area research and operations should be made a standard norm, rather than an exception.
- (4) In addition, the basic governance systems that were strengthened in FY2013, as mentioned in section 3 below, should be fully operationalised in FY2014. FY2013 was a transition period to build internal management systems, and we envisage a full-fledged governance structure in FY2014.

2. High Priority Activities

(1) Building Core Competence

What matters to IGES in the long run is to establish its core competence, which will enable the Institute to produce value added products. Thus, more focused efforts will be made on (i) full operationalisation of the “2050 Pathways Calculator” to be applied not only at the national level but also at the city level, (ii) continued efforts to systematise “Inventory and MRV” related activities, and (iii) full operationalisation of initiatives related to low-carbon technology, such as technology transfer guidebooks and technology needs assessment.

(2) Contributing to the Asia Low Carbon Strategy

IGES will be more substantially involved in the “Asia Low Carbon Strategy” being implemented by the Japanese Government. Major components will include (i) further promotion of city-to-city collaboration (Kitakyushu-Surabaya, plus a few new additional cases), (ii) initiation of specific activities for Myanmar, and (iii) introducing a platform for technology transfer between Japan/India, as a first step.

(3) Substantiating Networking Operations

Networking is an essential channel for IGES to generate impacts. Thus, the key networking operations as listed below should be fully drawn upon in this respect. (i) Strategic operation of LCS-RNet/LoCARNet by expanding the scope of these two networks and producing joint policy recommendations aimed at COP21, (ii) further expansion and substantiation of networking with the private sector such as Japan-CLP (Japan Climate Leadership Programme), (iii) Strategic

operation of APAN (Asia Pacific Adaptation Network) in conjunction with GAN (Global Adaptation Network), and (iv) full operationalisation of other platforms in which IGES is playing a key role, such as networking with local governments both inside and outside Japan, as well as with WEPA (the Water Environment Partnership in Asia).

(4) Deepening Collaboration with Key Partners

A Several networking operations could now be turned into more intensive forms of collaboration. On-going coordination to set up two potential collaborating centres: i.e. (i) the UNEP/IETC (United Nations Environment Programme/International Environmental Technology Centre) Collaborating Centre, and (ii) the UNFCCC (United Nations Framework Convention on Climate Change) CDM Regional Collaborating Centre is one such new development. Other possibilities to deepen institutional ties with IGES will be proactively explored with UNU-IAS (United Nations University Institute for the Advanced Studies of Sustainability) and AIT (Asian Institute of Technology), as well as those related to the Future Earth.

(5) Addressing Emerging Issues

IGES should continue to positively address important sustainability issues emerging in the Asia-Pacific region and the world. More specifically, IGES should (i) take the lead in facilitating cooperative actions to deal with serious air pollution in China and other Asian countries, (ii) make effective inputs into international discussions regarding SDGs, (iii) get more substantially involved in the operationalisation of the Decade for SCP, and (iv) address more squarely integrated natural resources management, taking into account increasing competition over land, water and forests.

3. Underpinning Priorities

IGES needs to strategically build up its own capabilities to effectively address the key priorities listed above. Relevant IGES capabilities are discussed below in four categories, i.e. Outputs, Impacts, Financing and Governance. The overall direction for FY2014 concerning these four important issues is depicted in the summary table attached, with broad trends over several years since the beginning of the Fifth Phase.

(1) More Outputs with Better Quality

- (i) Policy products¹ will achieve the targeted level under the Sixth Integrative Strategic Research Programme², while improving the quality of such papers.
- (ii) The Milestone Management will be further improved so that each individual staff member can clearly understand which product should be generated by which time. At the same time, awareness will be raised so that each staff member takes his/her commitments more seriously.
- (iii) The IGES Strategic Fund will be remobilised to give official recognition and financial

¹ IGES Policy Brief and Policy Report (to be reviewed by Quality Management Senior Coordinator.)

² 40 policy products

incentives to those staff members willing to produce flagship products, i.e. high quality outputs.

- (iv) The Flagship Team will be further mobilised to create good examples for other staff members, in producing truly effective policy products. When necessary, the Flagship Team will be also requested to guide and assist other staff members, particularly those selected by the IGES Strategic Fund, to improve the quality of their products.
- (v) The Senior Coordinator for Quality Assurance will be fully engaged from the early stages of policy products, so that the “clean production policy” will be fully operationalised.

(2) More Significant Impacts

- (i) Much clearer focus should be placed on key policy processes, such as the Post 2020 Climate Regime and the Post 2015 Development Agenda, drawing upon IGES strengths underpinned by its core competence and effective networking.
- (ii) More targeted policy products and proposals such as the idea of “Green Gift”³ and the introduction of an international expert team to review nationally determined GHG reduction targets, for example, should be generated in time for important political opportunities, both inside and outside Japan. Such products and proposals should be developed jointly with IGES partners, when necessary, channeled through effective networks in which IGES is playing a strategic role.
- (iii) Coordinated IGES wide operations are essential, involving the top management, where necessary, to generate meaningful impacts.
- (iv) Official recognition will be given to, for example, the “top 3 impacts” generated by IGES staff members in each fiscal year, using occasions such as ISAP.

(3) Sound Finance

- (i) Intensive efforts continue to return the institute to a sound financial state. Actions need to be taken both on the revenue side as well as the expenditure side.
- (ii) Institution-wide actions are to be taken to increase external funds from diversified channels, particularly for those related to high priority activities. Responsibilities held by senior staff members in this regard should be better highlighted.
- (iii) Basic Guidance is to be developed for IGES staff members concerned to prepare appropriate financial proposals so that proper budgeting could be made, reflecting more accurately the real costs incurred by the institute.
- (iv) Measures to streamline expenditures introduced FY2013 will be maintained and strengthened, when considered necessary. Expenditures for two major spending items, namely “international travel” and “outsourcing” will be kept lower than the level of FY 2013 expenditure for these items.

³ Green Gift is a newly proposed tax benefit policy so that grand parents’ donated capital to their grandchildren is exempt from donation tax, if the money is invested in renewable energy-related infrastructure. The policy was proposed by IGES and currently under consideration by the Japanese Government.

- (v) The total number of IGES staff members will not increase in FY2014 over the FY 2013 level. The 60% time charge target for external fund, which was introduced in FY2013, will remain the same so that research staff members become fully committed to this target.
 - (vi) Official recognition and incentive mechanisms will be introduced for efforts to reduce expenditure, without reconciling output delivery.
- (4) Effective Governance
- (i) Key internal management systems should be fully operationalised. The Milestone Management should be further improved for swift implementation. Clear messages should be given to all staff as to what should be done by when. The Time Management system should be fully operationalised to be linked to the Accounting System managed by each Task Manager. The Evaluation System should be more appropriately linked to the performance record contained in the above management systems.
 - (ii) Networking should be developed into a new phase, where more substantial institutional relationships will be actively explored to strengthen collaborations with key partners, such as the above mentioned two potential collaborating centres. ISAP should be more strategically used to strengthen meaningful networking and impact generation.
 - (iii) Outreach should also take on a new dimension by being more substantially involved in ENB (the Earth Negotiation Bulletin) related activities. Further efforts will be made to better organise various IGES workshops so that sound and visible products are produced subsequently. In addition, IGES outreach/networking capabilities should be more integrated into externally funded activities.
 - (iv) IGES will be more substantially involved in specific capacity development activities. Development of training materials is one of these activities, which should be, as much as possible, financially backed by external funds. New, IT-based knowledge management systems should continue to be introduced so that all staff can access essential knowledge and information, irrespective of their location.

Summary Table: Basic Strategy of the Business Plan FY 2014

	FY 2009 - FY2012 (Fifth Phase)	FY 2013	FY 2014	Remarks
<u>Outputs</u>				
Policy				Milestone, Flagship, etc.
Academic				
<u>Impacts</u>				Sharp focuses, targeted products, etc
<u>Finance</u>				
Overall Balance				External funds, Measures to streamline expenditure, etc.
External Funds				Focused efforts for external funds
<u>Governance</u>				Operationalisation of management systems, etc

I. Strategic Research

For each research area under ISRP6, priority issues will be determined and strategic research activities planned and implemented along with the “Three Modes of Operation for Strategic Research (Synthesis Research/ Policy Research for Problem-solving /Networking and Strategic Operation)” and “Criterion for Strategic Research (Overall and Comprehensive Vision/ Added Values/ Quickness and Timeliness)”. In FY2014, 38 tasks will be conducted in the seven research areas under the overall management of PMO at the Headquarters and satellite centres/offices.

1. Climate Change and Energy Area

The Climate Change and Energy Area (CE) aims to contribute to the realisation of low-carbon society and to propose a new form for the development path in Asia and the Pacific through enhanced actions at various levels (including national, sub-national and local levels). In this way, CE hopes to contribute to the development of global, multi-layered governance for the stabilisation of the climate system.

In this Sixth Phase, CE, in close collaboration with other Areas within IGES, aims to contribute to the real development of essential elements, such as enhanced nationally appropriate mitigation actions (NAMAs) supported by sustainable energy system, capacity building and methodology development for the measurement, reporting and verification (MRV) both at policy and project level, proposals on the institutional and long-term finance mechanism, the development and implementation of low-carbon technology projects through market mechanisms including the Joint Crediting Mechanism (JCM). In order to enhance added-value to research and strategic operations aiming at a shift towards a low-carbon society, the Area will lead a cross-area initiative on IGES core competence building, which is introduced as a high priority activity at the beginning of this document. Intended outcomes in the Sixth Phase are:

- Countries in Asia will be ready to take enhanced mitigation action at various levels.
- International climate governance is strengthened, to be multi-layered and effective for climate stabilisation, through a new legal framework to be agreed by 2015 and to be implemented in 2020, with the participation of all the UNFCCC Parties, as well as through enhanced actions under the 2nd Commitment Period of the Kyoto Protocol and the Cancun and Durban Agreements.
- The enhanced actions and the new legal framework will be formulated on along with key issues including nationally determined commitments, ensured transparency in actions, design of carbon markets and mechanisms to ensure that national commitments are consistent with global targets.

CE_1: Future Climate Regime (Pre and Post 2020)

This task aims to provide the UNFCCC process with relevant recommendations on the design of a comprehensive climate change regime, as well as on the operational rules and guidelines for pre-2020 enhanced actions. Through active involvement in the international process and the domestic process in Japan, the task analyses emerging priority issues which may include legal forms, equity/differentiation of commitments, and levels of mitigation ambition, NAMAs (Nationally Appropriate Mitigation Actions), MRV (Measurable, Reportable and Verifiable), and climate finance and climate technologies under the pre and post-2020 climate regime. This Task, in collaboration with BE (KRC) and other Areas, also plays a key role in implementing ‘initiatives related to low-carbon technology, such as technology transfer guidebooks and technology needs assessment’, which constitutes major part of IGES core competence building.

Major components in FY2014 are:

- Synthesis study on the future international climate regime such as UNFCCC
- Overall structure of the 2015 agreement on post-2020 regime
- International rules and process to enable ex-ante clarity, transparency and comparability of nationally determined contributions, and to ensure that Parties' contributions are ambitious as well as equitable
- Strategic operation related to UNFCCC, IPCC, Climate Technology Centre and Network (CTCN) and Technology Needs Assessment (TNA) process, and other processes

【Major External Fund】 ERTDF⁴(MOEJ: Ministry of the Environment, Japan), United Nations Environment Programme (UNEP)

CE_2: Model Analysis on Energy and Climate Change Policy Options

In order to achieve low-carbon development in a rapidly growing Asia, energy and climate change policies adopted by each country will have significant consequences. This research aims to promote a resilient and sustainable energy demand-supply system through quantitative analysis on mid-long term energy and climate change policies. First, mid-long term energy and climate scenarios up to 2050 will be analysed using techno-economic models and comprehensive policy assessments, taking into account the possible slowdown of worldwide nuclear power growth and the limitations of water resource availability on power generation. Second, energy saving and greenhouse gas emissions reduction potentials will be determined for Asian carbon-intensive industries such as the iron and steel sector. Considering the global trend in the iron and steel sector, bottom-up quantitative analysis will take into full account the deep uncertainties in future production levels caused by international competition. Policies in other countries will be also analysed to create mid-long term (2030 and beyond) policy proposals for carbon-intensive industries to achieve energy saving and GHG emissions reduction.

Major components in FY2014 are:

- Energy mix analysis using quantitative and qualitative methods
- Analysis on potential energy saving and CO₂ emissions reduction in the steel sector

【Major External Fund】 ERTDF (MOEJ), Korean Environment Institute (KEI)

CE_3: Capacity Building for Monitoring, Reporting and Verification (MRV) and Joint Crediting Mechanism (JCM)

In order to establish low-carbon society in Asia, it is important to develop a social infrastructure to measure, report and verify (MRV) greenhouse gases (GHGs) for various segments of society, i.e. national and local government, private sectors and research organisations including non-governmental organisations (NGOs). It is also vital to promote low-carbon development policies and measures and to encourage activities that will reduce emissions from each activity. The government of Japan has signed an agreement with 10 countries in Asia and other regions to establish and implement the Joint Crediting Mechanism (JCM), to facilitate development of an appropriate institutional framework as well as practical methodology for the measurement, reporting,

⁴ Environment Research and Technology Development Fund

and verification (MRV) of GHG combined with capacity building of stakeholders. This research task intends to integrate research and practice by providing direct support for the development of an institutional framework on MRV for the JCM and its project and methodology development, combined with capacity building for various stakeholders. This task, together with CE_5 and CE_6, plays a key role in IGES core competence building, in particular on the ‘continued efforts to systematise “Inventor and MRV” related activities’.

Major components in FY2014 are:

- Supporting the establishment of JCM system in countries in Asia
- Development of potential JCM mitigation projects and of methodologies and manuals
- Development of MRV and low-carbon technology related database and providing training for the Third Party Verification Body

【Major External Fund】MOEJ

CE_4: Climate Finance

Developing countries face various resource constraints when trying to effectively promote climate change policies. It is critical for all governments and stakeholders to understand how financial resources will be mobilised. Equally significant is the way in which these resources are accessed and utilised. This task focuses on the roles and functions of existing and emerging institutional arrangements, financial initiatives and negotiation agendas under and outside the UNFCCC. It aims to develop policy proposals through active involvement in the design process of the newly-established green climate fund (GCF). It aims to make contributions to coordination and cooperation among the different climate finance regimes, analysing roles and functions of various climate finances.

Major components in FY 2014 are:

- Enabling the access of Asian countries to climate finance
- Governance of national climate funds and implications to the GCF
- South-south climate finance flows

【Major External Fund】MOEJ, JSPS/KAKENHI⁵

CE_5: Market Mechanism

The purpose of this task is to support the establishment of institutional frameworks and capacity development for the effective implementation of market-based mechanisms (namely, Emission Trading and Crediting Mechanism) at the international level (UNFCCC). To do so, this task will develop rules of market mechanisms as well as a database, methodology and a guidebook for GHG emissions and reduction calculation, and carry out analytical research on the market mechanism for making improved proposals. This research will collaborate with international organisations such as the UNFCCC Secretariat and the ADB, to provide knowledge and institutional capacity strengthening to a wide audience in the region, so as to build the capacity of governments and private companies in the region as well as that of stakeholders of those countries implementing market mechanism. Based on the analysis and assessment of market-based mechanism such as Clean

⁵ Grants-in-Aid for Scientific Research by Japan Society for the Promotion of Science (JSPS)

Development Mechanism (CDM) and Joint Implementation (JI) being implemented in both developed and developing countries, basic elements which contribute to the design of new market mechanisms for the climate regime beyond 2020 will be analysed and proposals will be made to the UNFCCC negotiation processes.

Major components in FY2014 are:

- To make policy recommendations on the design of an international market mechanism for the UNFCCC process (submission of views, attendance to COP/SBs, publish technical reports)
- Implementing regional capacity building activities (i.e. regional workshop with ADB and UNFCCC secretariat and other regional and international organisations.)
- To conduct research on the design and implication of the domestic market mechanism (emission trading scheme and crediting mechanism) in developing Asian countries.
- Development of database, tools, and manuals related to market mechanism
- Hosting the UNFCCC CDM Regional Collaboration Centre (RCC) in Bangkok

【Major External Fund】MOEJ, UNFCCC Secretariat, Asian Development Bank (ADB)

CE_6: Asia Low Carbon Strategy Project

The Ministry of the Environment Japan (MOEJ) launched a project in FY2013 called “the Asia Low Carbon Development Strategy Project” (formally, Joint Crediting Mechanism Large Scale Project Development) to promote and demonstrate environmentally sustainable cities in Asia through the Joint Crediting Mechanism (JCM) that the Government of Japan is currently proposing under the UNFCCC. By focusing on Japanese environmental policy and technologies, which can be connected to green economy and growth in the Asia-Pacific region, the project aims to effectively promote low-carbon development at the sub-regional level through international collaboration involving diverse stakeholders, including municipalities, the central government, private sector and research organisations. The project will also provide “packaged support” to partner cities in Asia with the introduction of low-carbon policies and measures. Additionally, the project will implement a feasibility study with capacity building support for a wide range of sectors such as solid waste management, energy efficiency, water sanitation, and transport, involving various stakeholders (e.g. local government, private sectors, research, NGOs). The task is being implemented jointly by CE and other Areas, including KUC, KRC, IPSS, SCP, and GE.

Major components in FY2014 are:

- Low Carbon City-to-City Collaboration and development of JCM Feasibility Studies
 - Surabaya city, Indonesia-Kitakyushu city (KUC)
 - Bundong city, Indonesia-Kawasaki city (IPSS)
 - Haiphong city, Viet Nam – Kitakyushu city (KUC)
 - Yangon city, Myanmar-Tokyo, Osaka city and others (CE)
 - India – Technology transfer demonstration project (KRC, CE)
- Support City Level NAMA development (CE, GE)
- Platform for private companies and local governments (CE, IPSS)

【Major External Fund】MOEJ

2. Sustainable Consumption and Production Area

Engaging in relevant and selected global processes, the SCP Area aims to contribute to mainstreaming of SCP concept and policies in developing Asia. In the Sixth Phase, the Area intends to establish a niche for IGES, identifying and addressing the needs of developing countries, through gradually shifting its research focus from downstream (e.g. waste and pollution) into upstream issues (e.g. sustainable resource management/consumption, lifestyles, resource efficiency). To this end, the Area proactively engages itself to various policy processes including UNEP International Resource Panel, UNEP Sustainable Consumption Strategy development, SCP 10 years framework programme, CCAC MSWI, OECD's EPOC on EPR guidance development, Basel ESM framework, SWITCH Asia, and Regional 3R Forum in Asia. The Area also tackles the issue of decontamination and rehabilitation process in Fukushima through convening a series of local round-table meetings.

Intended outcomes in the Sixth Phase are:

- Regional/global discussions on urgent actions for resource saving and sustainable consumption
- A “REDUCTION” concept taking into account the context of both emerging and maturing economies
- 3R policy formulation and its implementation both at regional and national level
- Policy nexus of climate and 3Rs receives higher attention and linkage between international initiatives on low carbon and resource saving society
- Multi-stakeholder dialogue and collaboration (especially between community and experts) for decontamination and rehabilitation process in Fukushima

SCP_1: Transitioning to SCP

This synthesis research aims to generate an improved understanding of how developing countries can steer away from the traditional development model – based on mass-production, mass-consumption, and systems that require infinite economic growth – and what opportunities and challenges there are with formulating and implementing significant changes. By considering the various challenges associated with developing Asian economies, research will identify conditions for SCP to become a major policy agenda for developing countries. For comprehensive deliberation and identification of priority challenges, it is vital to grasp the trends of different flows (material, natural resources, water, food and energy) under the current consumption and production patterns as well as to identify effective policy intervention points. For these essential exercises, research will focus on reviewing theoretical concepts and empirical approaches such as transition studies and systems innovation, as well as practice-driven movements, such as transition towns and the new economy. The SCP Area will continue to engage in several SCP-related international processes, but has also emphasized the SCP concept and policies to be contextualized in developing Asia through its contribution of discussion papers to regional processes related to SCP 10 Year Framework Programme (YFP). Building on the successful collaboration with World Resource Forum under Task 2, in FY2014 this component will focus on preparing a short synthesis report on Reductions (including materials and energy saving socio-economic system and a shift in lifestyle for sustainable consumption) to be a synthetic summary of current understandings of the topic for the World Resources Forum and Global Research Forum (GRF) of SCP.

Major component in FY2014 is:

- Towards Reductions: A review of current research understanding and possible approaches

【Major External Fund】Asia Resource Circulation Policy Research (MOEJ), JSPS/KAKENHI⁶ (TBC)

SCP_2: Realisation of Sustainable Living and Consumption in Asia

This research will assist in evidence-based policy making and action in the field of sustainable living and sustainable consumption in developing countries in Asia. To this end, it will review lessons learnt from various efforts to encourage sustainable practices and try to come up with recommendations on effective approaches.

Based on case studies, the research explores ways to encourage sustainable living and sustainable consumption with an emphasis on the growing middle-class in cities in developing countries in Asia. Special attention is given to the components of household spending that are associated with high environmental impacts: housing, food and mobility. The research seeks to compile data on the current situation and trends in these three consumption areas for major economies in the region. The research will analyse how lifestyle choices and consumption patterns evolve and how they can be influenced in a sustainable direction, targeting both government-led initiatives (policies) and efforts by other actors, including business and NGOs.

With the above understanding, this research task will examine issues of sustainable consumption and lifestyles in an Asia-specific context, with most outputs and activities geared towards the implementation of policies that enable sustainable lifestyles in developing countries. As an impact generation strategy, the Area as a whole as well as Task 2 is now engaged in collaboration with the Japanese government to develop a plan for a leading sustainable lifestyle component of SCP10YFP. This will continue to have a major coordinating role under the sustainable lifestyle component of SCP 10YFP in collaboration with major stakeholders including UNEP SCP 10YFP secretariat and the Japanese government. In the meantime, building on the successful collaboration with World Resource Forum, the task will continue to engage in the “REDUCTIONS” project for potential flagship concept/synthesis theme for SCP Area for the phase.

Major components in FY2014 are:

- Exploration of sustainable lifestyle policies (A) REDUCTIONS, (B) Energy efficient households
- Facilitation of sustainable lifestyles through international initiatives (A) 10 Year Framework for Sustainable Consumption and Production, (B) SWITCH Asia

【Major External Fund】MOEJ Contribution to UNEP 10YFP, SWITCH Asia, JSPS Reductions Fund, JSPS/KAKENHI⁷, Asia Resource Circulation Policy Research (MOEJ)

⁶ Grants-in-Aid for Scientific Research by Japan Society for the Promotion of Science (JSPS)

⁷ Grants-in-Aid for Scientific Research by Japan Society for the Promotion of Science (JSPS)

SCP_3: Resource Circulation and Integrated Waste Management in Asia

This research will analyse policy frameworks and tools to realise sustainable resource utilisation targeting supply-chains from upstream to downstream of material flow, DfE (Design of Environment), improvement in resource efficiency, design of resource circulation and recycling systems, and integrated waste management. Since policies for resource circulation and integrated solid waste management (ISWM) have been formed gradually in the region, needs for policy research have shifted to those contributing to improved policy implementation. This task will put special focus on the research on governance and systems building in resource circulation, and ISWM policies and issue-nexus such as climate co-benefit, green job creation, as well as resource efficient product systems of 3R approaches. In addition, this research will actively engage with global and regional knowledge hubs such as UNEP resource panel, Regional 3R Forum in Asia and the Pacific, CCAC Waste Initiative, 3R International, or Global Partnership on Waste Management (GPWM) to disseminate research findings.

In a more practical manner, this research task will participate in a working group on 3R policy indicators to promote a core set of indicators for the Regional 3R forum in Asia and the Pacific. It also tries to operationalise their own methodology for sustainability assessment of resource circulation which can compare different economic settings of the recycling market. This task will continue to engage in the Regional 3R Forum in Asia and the Pacific and OECD's Global Forum on EPR (Extended Producer Responsibility). The component on climate co-benefit under task 3 is drastically expanding in the context of collaboration with Climate and Clean Air Coalition Municipal Waste Initiative (CCAC MSWI) as well as collaboration with UNEP/IETC.

Major components in FY2014 are:

- Research on governance for sound resource circulation in Asia in collaboration with Regional 3R Forum in Asia and the Pacific
- Research on sustainability assessment of resource circulation system
- Issue nexus and co-benefit of resource circulation and other issues with particular focus on climate benefits at city level

【Major External Fund】Asia Resource Circulation Policy Research (MOEJ), PSEE⁸ (MOEJ), CCAC, MOEJ

SCP_4: Fukushima Action Research on Effective Decontamination Operation (FAIRDO)

IGES has been addressing the nuclear disaster in Fukushima with the launch of Fukushima Action Research on Effective Decontamination Operations ('FAIRDO'), in response to the accident at Fukushima Daiichi Nuclear Power Plant. With cooperation from Fukushima University, the German Institute for Advanced Sustainability Studies e.V. (IASS), Karlsruhe Institute of Technology (KIT), the German Federal Office for Radiation Protection (BfS) and other partner organisations, IGES invited researchers in and outside of Japan and formed an interdisciplinary team. The team draws on the experience and knowledge gained from Europe, such as the EURANOS Project, guidelines on radiation protection and decontamination formulated after the 1986 Chernobyl nuclear accident, and promotes research on the possibility of applying this knowledge to decontamination in Japan. At the same time, it forges links with local authorities and communities in Fukushima to pursue its research

⁸ Policy Studies on Environmental Economies

aimed at proposing effective decontamination implementation for the area, following three research focuses: governance, decontamination plans and risk communication.

Major components in FY2014 are:

- Organisation of the 2014 roundtable series toward facilitating dialogues among local stakeholders (while analysing the process of consensus building in the disaster affected area toward decontamination, rehabilitation, and radiation projection in Fukushima);
- Investigation of the needs of information related to the rehabilitation in Fukushima (toward establishment of the Information Platform to support the roundtable series);
- Dissemination of research results to the international society (with the view to forming an international network of researchers & policy makers to be better prepared for nuclear emergencies)

【Major External Fund】JST⁹ Fund, Mitsui Fund, JSPS/KAKENHI¹⁰

SCP_5: Participation in Policy Processes in Relation to SCP

This strategic operation is aimed at harnessing IGES research to generate practical impact by partnering with other organisations and through active involvement in major policy processes. It will also develop effective partnerships with other organisations, individuals and policy bodies to ensure that IGES' work is better informed towards meeting its objectives. While continuing to engage with new partners, this task will strengthen collaborations which have built on past efforts including the substantial contributions it has made, for example, towards the UNEP International Resource Panel, SCP10YFP, the ASEAN SCP Forum, the Asia-Pacific Roundtable for SCP, SWITCH-Asia program, the Regional 3R Forum in Asia and the Pacific, and the Global research Forum for SCP.

Activities under this task would involve: development and distribution of easily accessible synthesis reports on relevant policy areas; capacity development training for policy makers; and enhancement of collaboration among researchers and practitioners in Asia, as well as facilitating knowledge exchange with, and adaptation from other regions.

Major components in FY2014 are:

- General policies: Actively to be engaged in relevant policy processes and forum in the fields of SDGs, 10YFP, Green Economy, etc.
- Resources management: Focusing on the 3Rs and Resource Circulation projects, to propose policies and support international efforts to facilitate sustainable resource management.
- Lifestyle: To conduct outreach activities targeting actors and networks promoting sustainable lifestyles in Asia.

【Major External Fund】MOEJ, SWITC-Asia

3. Natural Resources and Ecosystem Services Area

Despite the important array of services that ecosystems provide in the Asia Pacific region, they are

⁹ Japan Society for the Promotion of Science

¹⁰ Grants-in-Aid for Scientific Research by Japan Society for the Promotion of Science (JSPS)

under increasing pressure from growing populations and economies. A key challenge is to fully integrate natural resource management into all aspects of national economic development, and to ensure that natural resource management is adequately resourced for effective implementation at national and subnational levels. Collaboration between countries on natural resource management will also become increasingly important as economic integration progresses in the region.

The IGES NRE Area aims to assist countries in meeting these challenges through solution-oriented and nexus research on high priority issues related to forest and biodiversity conservation, climate change adaptation, and water resource management. In particular, the NRE Area will provide analytical inputs, capacity building, networking and other support for the development of cross-sector, multi-stakeholder approaches to natural resource management.

Intended outcomes in the Sixth Phase are:

- Conservation of natural resources through institutions (policies and organisations) that effectively and fairly deal with the increasing competition over land, water and forests.
- Conservation of forests through REDD+ strategies and implementation of management plans.
- Improved management of biodiversity through National Biodiversity Strategies and Action Plans
- Increased preparedness and adaptive capacity for shocks and long-term trends associated with climate change, including more resilient agricultural and rural livelihood systems.
- Improved management of water resources to deal with scarcity and quality threats.

NRE_1: Resilience of Livelihood: Land, Water, Food and Energy

A review will be undertaken of integrated natural resource management (INRM) concepts and the extent to which these concepts are reflected in national strategy and planning documents in developing countries. Several Asia-Pacific developing countries with contrasting organisational models for natural resource management will be selected. Difference in the existing state models for natural resource management will be reviewed and their consequences in natural resource conservation and exploitation will be analysed. Through a study of best practice and progressive approaches, practical recommendations for cross-sector, multi-stakeholder and multi-tiered governance structures and processes for INRM will be provided.

Task outcome for the Sixth Phase

- Conservation of natural resources through institutions (policies and organisations) that effectively and fairly deal with the increasing competition over land, water and forests.

The synthesis research in FY2014 will consist of a review of selected economic instruments that are being used to promote natural resource management in Asia-Pacific developing countries. The instruments that could be included in the review are: REDD+ (FC Team); PES for watershed management – examples from Vietnam, Indonesia, etc. (FC and FW Teams); Eco-Labeling (FC Team); Crop insurance (AD Team); Biodiversity valuation and biodiversity offsetting (BD Team).

NRE_2: REDD+ and other Forest-related Issues

In the Sixth Phase, IGES research on forest conservation will focus on REDD+ and the trade in sustainable wood products. Building on its action research on community carbon accounting, this research will undertake a study on community-based REDD+ approaches. At research sites in several Asia Pacific countries, approaches to train communities to monitor forest biomass (carbon), biodiversity values and REDD+ safeguards in their forests will be tested. The research will explore the idea of establishing an international network to bring together initiatives and experiences on

community-based REDD+ approaches. Research into national REDD+ readiness will be conducted, focusing on the development of national governance standards, links between REDD+ and NAMAs, and linking subnational and national MRV systems. The research will also analyse bottlenecks in the REDD+ negotiations and set out alternatives for moving forward on these. The IGES Online REDD+ database will be used to make information on REDD+ available in a useful format as well as to disseminate the results of IGES research. Under the Responsible Asia Forestry and Trade (RAFT) partnership, which aims to promote the trade in legal and sustainable wood products, IGES will contribute analytical studies to support the development and uptake of forest sector legality and sustainability standards.

Task outcomes for the Sixth Phase

- Legal and sustainable forest management are promoted
- The REDD+ safeguards can be respected and promoted
- Community participation in forest monitoring is promoted
- Inclusive national REDD+ readiness processes is promoted

Major components in FY2014 are:

- Participatory REDD+ approaches: Research will be conducted on community participation in forest monitoring and REDD+ project design.
- Deforestation drivers: Research will be conducted on the competition over land between biofuels feedstocks and natural forest.
- International negotiations: This component will investigate bottlenecks in the REDD+ negotiations and ways to overcome these, as well as how REDD+ can be integrated with other elements of the international climate framework (e.g. NAMAs).

【Major External Fund】 MOEJ, RAFT, APN

NRE_3: Climate Change Adaptation

The research on climate change adaptation in the Sixth Phase addresses facilitating mainstreaming adaptation at sector and national levels in developing countries in the Asia-Pacific by identifying facilitators and barriers to mainstreaming adaptation, by identifying and operationalising means to measure the progress in adaptation, promoting the culture of disaster risk reduction through mechanisms such as risk finance, by observing and analysing adaptation governance in the region, by building the capacity of stakeholders through objective assessment of training needs, and identifying integrated adaptation decision making frameworks.

Research results will be actively disseminated through the Asia Pacific Adaptation Network (APAN) in cooperation with the Regional Centre in Bangkok.

Task outcome for the Sixth Phase

- Barriers to the promotion of risk insurance are recognised and policies are introduced to overcome these barriers
- The indicators developed are used to identify effective local adaptation actions
- Policy makers are able to use the latest scientific knowledge on the issue of loss and damage
- Through training on climate change adaptation, Government administrative officers are able to implement adaptation actions.

Major components in FY2014 are:

- Submit proposals for external funding on a) equity and fairness in community based adaptation, b) review and analysis of national adaptation plans.

- Summarise, share and publish the results of the *Suishinhi* S8 project, which is implemented by IGES with the collaboration of national partners in the Gangestic basin.
- Assess community risk insurance initiatives under an APN Project that we are implementing in India, Japan, Malaysia, Philippines and Australia, with the help of national collaborators. As part of this project, conduct a policy-science dialogue and surveys.
- With national collaborators in Bangladesh, research how microfinance can contribute to household resilience and adaptive capacity.
- With funding from ADAPT-Asia, assist National Bank for Agriculture and Rural Development (NABARD), India in assessing the existing project evaluation methodologies for climate change adaptation and propose guidelines for evaluating projects funded under the Adaptation Fund in India.
- If a proposal for the *Suishinhi* on climate change adaptation, migration and internal displacement is successful, then case studies should be conducted in India, Nepal, Bangladesh and Vietnam on migration and internal displacement and options for adaptation.
- If a proposal to the Asia Pacific Network for Global Change Research (APN) on extreme events and non-economic damages is successful, then case studies should be conducted in Japan, Philippines, Thailand and Bangladesh.
- Support Asia Pacific Adaptation Network (APAN) and the Global Adaptation Network (GAN).

【Major External Fund】 ERTDF(MOEJ), APN, Adapt Asia-Pacific

NRE_4: Water Resource Management

This research aims at contributing to the increase of efficiency of water resource use and also to ensure local sustainability by proposing models of integrated water resource management and governance mode in different socio-economic settings. As part of pursuing IWRM, it also addresses waste water management, which receives significant level of interest in many Asian countries, and explores the potentials for promotion of adequate treatment, reuse of treated water, and resource recovery of such useful materials as methane and phosphorus. It also intends to contribute to international discussions and policy making processes on sustainable water management by sharing experiences and knowledge in the Asia-Pacific region accumulated by research such as that conducted through the existing networks with which IGES is involved (e.g. Asia-Pacific Water Forum (APWF), Water Environment Partnership in Asia (WEPA), and Asia-Pacific Adaptation Network, and APWF Regional Knowledge Hub for Groundwater Management).

Task outcome for the Sixth Phase

- Improved management of water resources in Asian region under the framework of SDGs/MDGs.
- Local/national policy makers are able to develop a knowledge-base on water resources and wastewater management by utilising the existing regional network such as Water Environment Partnership in Asia (WEPA)/Groundwater knowledge Hub.

Major components in FY2014 are:

- Water governance to address water-land linkage (nexus)
- Sustainable wastewater management which contributes to increased resource efficiency
- Knowledge sharing and networking (Water Environment Partnership in Asia (WEPA), etc.)

【Major External Fund】 MOEJ, International Water Management Institute (IWMI)

NRE_5: Biodiversity and Ecosystem Services

This research will focus on the *Satoyama* Initiative, quantification and valuation of biodiversity and ecosystem services, biodiversity offsets, and business engagement in the conservation and sustainable use of biodiversity. It will also expand and strengthen these areas of research in order to contribute to the design of an international framework as well as to policy formulation in line with the Aichi Biodiversity Targets (10 years from 2010-2020).

Task outcome for the Sixth Phase

- Knowledge is built in the Asia Pacific region and beyond on the maintenance of socio-ecological production landscapes and seascapes (SEPLS), including identification of successful management and governance models
- Policy makers acquire deeper understanding on the options for introducing quantification and valuation of ecosystem services into policy frameworks based on trials of various methodologies and accumulated knowledge on market and non-market values of ecosystems.
- Progress is made towards the introduction of biodiversity offset methodologies in Japan based on the examination of their policy context and implications.
- Effective policy frameworks to mainstream biodiversity considerations within business activities are identified and considered for introduction in Japan, based on supply chain appraisals and analysis of existing certification and standardisation systems

Major components in FY2014 are:

- Enhancing the resilience of socio-ecological landscapes, including activities for the International Partnership for the Satoyama Initiative
- Quantification and valuation of Ecosystem Services and Natural Capital
- Research and analysis on conservation of biodiversity in business sectors
- Research and analysis on biodiversity offset procedures and policies

【Major External Fund】 MOEJ, UNU-IAS (United Nations University Institute for the Advanced Studies of Sustainability)

NRE_6 : Knowledge Platform for Climate Change Adaptation and Natural Resource Management

This task aims to promote active networking by APAN, analyze the latest developments and trends in international dialogue on climate change adaptation, and disseminate knowledge and information to a wide range of audiences, including the general public.

Task outcome for the Sixth Phase

- Promotion of knowledge and information sharing, policy dialogue, and national debate on climate change adaptation.

Major components in FY2014 are:

- IPCC-related activities: Provide technical support to MOEJ by reviewing AR5 and its relevant documents such as submissions; Organise public awareness activities such as symposiums.
- Networking/knowledge sharing: Support communication between APAN and MOEJ; Establish/facilitate regular communication and joint activities between APAN and LCS;

Facilitate communication and collaborations with other relevant organisations, including NGOs and international organisations.

【Major External Fund】 MOEJ

4. Green Growth and Green Economy Area

Transition to a green economy requires fundamental changes in the current models of achieving economic growth which have been built on carbon and resource-intensive technologies and infrastructure. To achieve sustained and inclusive growth in Asia and the Pacific, it is indispensable to take up a green growth pathway which enables the creation of green and decent jobs, and helps to green the investment in public infrastructure and private sectors, as well as adopt low-carbon, cleaner, and energy and resource-saving technologies, conserve natural capital and at the same time to improve human well-being and eliminating poverty. Emerging Asian economies and other developing countries in Asia and the Pacific are well positioned to take a leading role in a green economy revolution. To foster policy development and implementation, it is important to ensure policy making based on science and evidence. The GE Area tries to provide better knowledge on the impacts of low-carbon and green economy policies through policy assessment using quantitative analysis.

Intended outcomes in the Sixth Phase are:

- Developing countries make national green economy strategy and implement policies supporting the transition to a green economy.
- Asian countries make and implement appropriate policies supporting the creation of green jobs.
- Better knowledge supporting policies on sustainable resource use can be provided by the UNEP International Resource Panel.
- Several low-carbon and environmentally sustainable cities can be established in Asia through the implementation of the Joint Crediting Mechanism proposed by the Japanese Government.
- Developing countries build a nexus strategy on water, energy and food to ensure climate-resilient and low-carbon development is achieved.

GE_1: Transition to Green Growth/Economy

This task aims to explore different models for achieving a green economy in Asia-Pacific region through policy assessment based on quantitative analytical tools. The task will fully utilise accumulated modelling techniques (Computable General Equilibrium [CGE] modelling, input-output analysis, econometrics and Geographic Information Systems [GIS]) and ongoing research activities such as the Policy Study of Environmental Economics (PSEE) on sustainable resource use, valuation of ecosystem services and water-energy-climate nexus, etc. Further, new research areas will be explored to identify effective policies and measures for Asian developing countries. Through the implementation of this task, the modelling and quantitative policy assessment capacity of the GE Area will be enhanced.

Major components in FY2014 include:

- Governance for sound resource circulation in Asia (PSEE-Resource);
- Sustainability and happiness indicators (PSEE-Indicator);
- Water-energy-food nexus;
- Study on the rebound effects and impacts on green economy policies;

- Assessment of land competition for food, biofuel and REDD+ in Indonesia;
- GIS-based methodological development for more accurate monitoring of urban land cover.

【Major External Fund】MOEJ, APN, JSPS/KAKENHI¹¹

GE_2: Green Investment and Green Jobs

Green investment and green jobs creation are two important elements for the transition to a green economy. Green investment is vital for fundamental changes in the structure of conventional economic development and energy infrastructure which are built on unsustainable energy and resource use. Green jobs creation is important to address the social aspect of a green economy and deliver improved human well-being. This task aims at two policy processes at the international level. One is the Partnership for Action on Green Economy (PAGE), initiated by United Nations Environment Programme (UNEP), International Labour Organization (ILO), United Nations Industrial Development Organisation (UNIDO) and United Nations Institute for Training and Research (UNITAR). Selected as one of three Centres of Excellence of UNEP, IGES/GE Area will continue to contribute to UNEP-led advisory services to give support to national governments in developing countries to make national and sectoral strategy and plans for green economy. Another policy process is ILO's Green Jobs Assessment Institutions Network (GAIN) aiming to support national green jobs assessment.

Major components in FY2014 include:

- Comparative study on green investment in Japan, Republic of Korea and China;
- Green economy assessment (UNEP/PAGE related work);
- Green jobs assessment (ILO/GAIN related work).

【Major External Fund】UNEP, ILO, JSPS/KAKENHI¹²

GE_3: Business Roles and Initiatives

Actions by various stakeholders in society will be needed to develop a low-carbon society which will take up the key challenge for transition to green economy. Involvement of industry is especially significant from the aspects of the size of its contribution to GHG emissions, its strong voice in the formation of climate change policies, and the important role industry plays in the development and deployment of low-carbon technology innovations. This research and related activities will examine the role of industry in the introduction of ambitious climate change policies and concrete strategies to substantiate green economy, by taking into consideration the global business competitiveness and deterioration of terms of trade in Japan caused by a price increase in resources such as crude oil.

Specifically, together with Japan Climate Leaders' Partnership (J-CLP) (a leading business coalition on climate change; Secretariat: IGES), proposals on climate change policies from a business standpoint will be delivered. In addition, business models that will contribute to the creation of green economy will be recommended and their implementation potential will further be sought.

¹¹ Grants-in-Aid for Scientific Research by Japan Society for the Promotion of Science (JSPS)

¹² Grants-in-Aid for Scientific Research by Japan Society for the Promotion of Science (JSPS)

Major components in FY2014 are:

- Expansion of a climate proactive corporate network
- Delivering proactive messages from corporate network to advance climate policies
- Policy proposal of Green Gifting scheme for promoting investments in renewable energies, and support activities for its implementation
- Policy research and proposal on carbon pricing
- Policy dialogue between Japanese business leaders and scientists
- Policy dialogue between Japanese business leaders and ministries

【Major External Fund】J-CLP, MOEJ

GE_4: Policy Process and Policy Dialogue

On the one hand, IGES has been involved in many policy processes at the international, national and city levels related to low-carbon development and green economy. On the other hand, the GE Area has developed several analytical tools, such as the CGE modelling, input-output analysis, Japan 2050 Pathway Calculator, econometrics, and GIS, etc. It is important for the GE Area to make use of existing modelling capacity and apply different analytical tools to support other areas in their impact generation on various policy processes. One focused area in FY2014 is to extend the applicability of the Japan 2050 Pathway Calculator, developed by IGES, NIES and Mizuho Research Institute. As part of IGES core competence building, the Area focuses on extended application of the tool to other Asian countries, as well as at a city level, which will support the promotion of LoCARNet and the Asia Low-Carbon Strategy.

Major components in FY2014 include:

- Application of 2050 Pathway Calculator;
- Quantitative evaluation of ecosystem services.

【Major External Fund】MOEJ

5. Business and Environment (Kansai Research Centre)

The Kansai Research Centre will promote empirical strategy research to facilitate sustainable business, as well as to promote innovation, diffusion and transfer of low carbon technologies in Asia in the area of Business and Environment.

KRC will also follow up the pilot projects under "Research partnership for the application of low carbon technology for sustainable development (ALCT)" project, which was funded by JST and JICA. It will verify the effects of low carbon technologies and conduct capacity-building of plants where the project are mainly currently ongoing, and make efforts to diffuse the technologies to clusters or cluster similarities by using the introduced equipments. There will also be development of outputs which gained from ALCT project in India to other Asian countries (Indonesia etc.).

In addition, KRC makes policy recommendations based on the achievements of "Market-based instruments for improving company carbon performance in Northeast Asia (MBIs)" project implemented in the Fifth Phase, as well as promoting policy research by making full use of the experiences on research techniques and analysis methods which help in understanding companies' intention and reaction to energy saving and climate change policies, with the focus on the development and diffusion of the low carbon technologies in companies.

Furthermore, cooperation is actively carried out with international organisations to promote technology transfer and application based on the research findings and achievements.

Intended outcomes in the Sixth Phase are:

- To build a framework for cooperation towards application of Japanese low carbon technologies for specific clusters in India.
- Specifically, to implement concrete activities related to the practical approaches which have immediate effects by improving the method of operation management etc.
- To ensure that Asian countries (Indonesia etc.) gain a better understanding low-carbon technologies from Japan.
- Regarding the joint research of Japan China and Republic of Korea, effects are expected regarding CO₂ emissions reduction due to the development and diffusion of the selected low-carbon technologies, and the knowledge on necessary cost of low carbon technology application to be utilised by policy makers.

KRC_1: International Transfer and Application of Low Carbon Technologies

International Transfer and Application of Low Carbon Technologies (ITAT) project is a contribution to international efforts to promote technological collaboration towards sustainable development. ITAT project aims to delineate technology deployment/diffusion pattern to develop a tangible roadmap or scenario for low-carbon technology transfer and application in India and other Asian countries. It is a project that builds on the findings of the ALCT project conducted by IGES-KRC and completed in March, 2014. Under the ALCT project, feasibility studies on several Japanese low-carbon technologies have been conducted, and pilot projects on promising technologies have been implemented in Indian SME. Thus, ITAT project will focus on assessing the opportunities and challenges of deploying/diffusing those promising technologies, but not excluding others, in Indian SME clusters, regions and country-wide as well as in other Asian countries. ITAT research activities include practical analysis (based on pilot projects implementation, measurement activities) as well as applying statistical and econometric analysis to assess policy and business initiatives towards the diffusion of low-carbon technologies in India and other Asian countries. On-site training programmes and outreach activities are also conducted to raise awareness of SME and other stakeholders. This Task, in collaboration with CE and other Areas, also play a key role in implementing ‘initiatives related to low-carbon technology, such as technology transfer guidebooks and technology needs assessment’, which constitutes a major part of IGES core competence building.

Major components in FY2014 are:

- Follow-up activities to ALCT project in India (Under Asia strategy project)
- Continue monitoring and evaluation of pilot projects; develop a business guide/manual regarding the application of Japanese low-carbon technologies; and conduct capacity building and outreach activities
- Develop sound MRV methodologies and assess the potential of the application of Japanese heat pumps technologies (EHP and GHP) in Indonesia (Under MRV project)
- Assess the co-benefits from the application of heat pump technology in India (Under cobenefit project).

【Major External Fund】MOEJ

KRC_2: Policies and Business Initiatives toward the Innovation and Diffusion of Low Carbon Technologies in Asia

This project studies the effects of climate policies in promoting business practices in the innovation

and diffusion of low-carbon technologies. Focus is put on economic approaches, particularly carbon pricing policies like taxation and emissions trading schemes, but not excluding the financial incentives and technology programmes. The field research basically continues to target the three large economies in Northeast Asia: Japan, China and the Republic of Korea, and may spread to the other major emitting countries of greenhouse gases (GHG) in Asia. The diffusion curves of selected low-carbon technologies under various policy scenarios are simulated and then used to quantify their contribution to the mitigation of GHG emissions and corresponding costs. The outcome of this research is used to assist related national governments and business associations as they discuss and formulate policy and technology roadmaps for the realisation of economy-wide or sector specific targets of GHG mitigations in the medium and even long term. The policy makers in this region will become more capable of promoting the diffusion of low-carbon technologies by the integrated use of economic policy measures.

Major components in FY2014 are:

- Development and finalisation of the questionnaire format together with local research partners based on consultations to the experts of low-carbon technologies and hearing interviews with certain companies
- Conducting questionnaire surveys of companies in target sectors to measure their technology applications in response to various policy situations
- Construction of a survey dataset and depiction of low-carbon technology diffusion curves under assumed policy scenarios
- Arrange dialogues between policy experts and/or policy makers to reflect outputs from previous research onto the design of carbon pricing policies and the ongoing analysis of policy effects in low-carbon technology diffusion

【Major External Fund】Hyogo Prefecture

KRC_3: International Trends and Input to Relevant Processes on Technology Transfer

To solve actual problems in transferring technologies, this task intends to enhance collaborative networks aiming at pooling the knowledge and synergising the efforts of various stakeholders working on technological collaboration (Research & development, deployment and diffusion) between Japan and Asian countries. The project intends to provide inputs in a timely manner to important national, regional and international policy processes on technology transfer to explore opportunities to conduct joint activities with them regarding technology transfer such as through joint projects, consulting, outreach activities, training programmes, etc. As outcome, this research will assist the Climate Technology Centre and Network (CTCN) and other processes to transfer Japanese low-carbon technology overseas.

Major components in FY2014 are:

- Input to existing important process for transferring and disseminating low-carbon technologies.
- Enhance the synergy with other Areas at IGES-HQ through conducting joint projects.
- Implement the synthesis research related to technology transfer.

【Major External Fund】MOEJ, Hyogo Prefecture

6. Integrated Policies for Sustainable Societies

The Integrated Policies for Sustainable Societies (IPSS) area was created to bring together projects that aim to close “implementation gaps” in sustainable development planning and policy. An overarching objective of IPSS is mainstreaming sustainability into policy processes concentrating on and beyond the environment. Toward that end, IPSS consists of one cross-cutting task that tracks and contributes to several key policy processes (IPSS-1). It also consists of four theme-specific tasks that aim to position sustainability at the core of education systems (IPSS-2), urban planning (IPSS-3), climate/air pollution policies (IPSS-4), and the post-2015 development agenda (IPSS-5).

Intended outcomes in the Sixth Phase are:

- Several countries adopt education for sustainable consumption policies and standardised approaches to evaluating education for sustainable development policies.
- More Asian countries join the Climate Change and Clean Air Coalition (CCAC) leading to reductions in transboundary air pollution; and a Green Climate Fund recognises and rewards co-benefits.
- A Post-2015 Development Agenda reflects lessons learned from MDGs and meaningfully incorporates “governance” into targets/indicators and implementation mechanisms
- A standardised set of MRV tools and methods facilitate sustainable low-carbon planning and governance in cities in Asia

IPSS_1: International Processes and Governance for post-2015 and beyond

The research will track key policymaking processes at all levels of government and practice, especially in relation to the post-2015 development agenda. In so doing, this research is expected to contribute to other tasks in and outside IPSS, including the Low Carbon Cities, by making available research findings on governance that may aid transition to low-carbon cities. It will be explored how to link this task with Task 2 on Education for Sustainable Development to further develop an integrated approach among tasks of this area. Efforts will also be made to link to other tasks that may benefit from governance related components as well as an emerging body of work on sustainability transitions, where appropriate and useful.

This task will target pursue five processes or sets of actors in FY 2014:

- Science and processes - Independent Research Forum (IRF) (external funded)
- Stakeholders - CSO Engagement and others (internal funded)
- Partners and Networking - (ASEF, IISD and others) (internal funded)
- Content and Management - SDplanNet Asia-Pacific and Africa (external funded)
- Financing - Seek external grants and contracts related to international processes

【Major External Fund】: IRF, SD PlanNet (Managed by BRC)

IPSS_2: Education and Capacity Development for Sustainable Development

The Education and Capacity Development for Sustainable Development task aims to provide strategic policy recommendations and capacity building inputs to strengthen institutional structures/processes to achieve transformative learning for sustainable development especially focusing on international processes on Education for Sustainable Development, regional processes on Education for Sustainable Consumption, and local and urban processes for learning on Sustainable Lifestyles. Education and Capacity Development for Sustainable Development must

address whole-systems learning opportunities and engage formal, non-formal, and informal education to support transitions towards sustainable societies.

Major components in FY2014 are:

- **Monitoring and Evaluation of Education for Sustainable Development (M&E of ESD):** To develop a systematic approach for assessment of ESD implementation in the Asia-Pacific region during the UN Decade of ESD (2005-2014), with the key goal of identifying & piloting Indicators of ESD.
- **Capacity Development and Education for Sustainable Consumption (ESC):** To strengthen the roles and capacities of national governments in coordinating effective implementation of ESC and to support the development of a regional network/ knowledge hub to support institutional capacity building on ESC.
- **Sustainable Lifestyles – Engaging Citizens in achieving Low-Carbon, Sustainable Cities (SL-LCSC):** To raise perception on how citizens can engage and contribute to achievement of Low Carbon, Sustainable Cities (LCSC) and conversely on how local/municipal governments can better identify and capitalise on important learning/capacity building opportunities that arise in their efforts and plans to transition towards LCSC.

【Major External Fund】 Kanagawa Prefecture, MOEJ

IPSS_3: Life Style Change and Energy Consumption for Low-Carbon Cities

In collaboration with the related research on low-carbon cities being conducted by Kitakyushu Urban Centre, this research promotes relevant practical studies with environmentally advanced cities in the Kanto region (Tokyo, Yokohama, Kawasaki etc.) Currently, Japanese cities have already been aiming for a major transformation from polluted cities to green cities, and based on the concept of environmental cities of the future and green innovation, there have been developments by local authorities on various levels. Through the coordination and dissemination of experiences in sustainable city planning that have been promoted recently in Japan, plans are being made to contribute to low-carbon, resource circulation type infrastructure and the development of leapfrogging, which will be highly significant in the near future in Asian cities.

Major activities in FY2014 are:

- **Capacity development at the city level:** IGES develops tools and methods that would enhance low-carbon city development in the Asia Pacific
- **Trend towards urban transformation to low-carbon society:** Energy saving activities by industry post-disaster, and development of new energy businesses
- **Sustainable Lifestyles:** Sharing and strengthened collaboration among local authorities in Japan and across Asia
- **Multilevel governance:** Research and analysis on strengthening multiple government level cooperation and multi-actor participation that would enhance the ability of local authorities to implement low carbon city development.
- **City to city networks:** Research and analysis on how, when and in what form inter-city networks can be effective in facilitating knowledge transfer and capacity development for low carbon development.

【Major External Fund】ERTDF (MOEJ)

IPSS_4: Co-benefits Approach in Asia

This research will identify opportunities and constraints to achieving three types of co-benefits with climate change: 1) air/climate co-benefits from mitigating short-lived climate pollutants (SLCPs) such as black carbon and tropospheric ozone; 2) environmental co-benefits from mitigating greenhouse gases (GHGs) while reducing air, water and waste pollution in key sectors (energy, waste, transport and buildings); and 3) developmental co-benefits from bringing carbon finance to women, the urban poor, and other disadvantaged stakeholders. This research will go beyond quantifying co-benefits to analysing how 1) the science-policy interface influences co-benefits from abating SLCPs, 2) the political economy of key sectors influences co-benefits from mitigating GHGs; and 3) the design of governance structure influences co-benefits flowing to disadvantaged stakeholders. Outputs from this project will be disseminated through the Asian Co-benefits Partnership (ACP) to air quality (CCAC), climate change (UNFCCC), and sustainable development (SDGs) policy processes at multiple levels.

Major activities in FY2014 are:

- Secretariat's functions of ACP
- Research on gender co-benefits
- Research on air quality co-benefits

【Major External Fund】MOEJ, ADB, Clean Air Asia (CAA)

IPSS_5: Sustainable development goals (SDGs)

This research will develop recommendations to strengthen governance for sustainable development at multiple levels: global, regional, national, and local. It will also consider how to strengthen multi-stakeholder participation in sustainable development governance, to promote better decision making, implementation, and greater social inclusion. These recommendations will be developed in the context of the global processes for the Post 2015 Development Agenda and Sustainable Development Goals. The study will be conducted from the perspective of multilevel governance, which emphasises the importance of coordination within and between the different levels of governance as well as strengthening multistakeholder participation in each level. This research will be conducted as part of a much larger project in conjunction with other universities, and research institutes. As a part of this larger project, IGES will also collaborate in developing recommendations for Sustainable Development Goals themselves, especially from the standpoint of strengthening governance and promoting greater social inclusion; it will also collaborate to develop recommendations for strengthening governance of financing for sustainable development. IGES will also collaborate with a group of global research institutes called the Independent Research Forum 2015 (IRF2015) to input messages into the key related global processes.

Major activities in FY2014 are:

- Contribution to development of SDGs from a governance perspective
- Governance for implementation of SDGs

【Major External Fund】ERTDF (MOEJ)

7. Sustainable Cities (Kitakyushu Urban Centre)

Kitakyushu Urban Centre (KUC) aims to contribute to the development of green, low-carbon and resilient (i.e. sustainable) cities without compromising the steady economic growth in Asia and the Pacific by disseminating pragmatic and effective local policies and practices for that. KUC analyses such local policies and practices with particular focuses on low-cost and applicable technologies and

systems using local knowledge in view of changing the policies and management systems of local governments, business models of private companies and behaviour of individuals.

Intended outcomes in the Sixth Phase are:

- Low-carbon and resilient development policies/practices are mainstreamed and implemented in selected cities
- Effective environmental management systems and policies, including pollution control, waste minimisation, energy and resource efficiency and decentralised energy and resource management, are adopted in selected cities
- Mutual learning processes among various stakeholders for developing sustainable cities are enhanced at regional/national levels

KUC_1: Policy Research on Low-Carbon and Resilient Cities

Many developing Asian countries are enjoying steady economic growth currently which is supported by ever more increasing energy and resource consumption as well as waste generation and greenhouse gas (GHG) emissions. Economic growth attracts people to urban areas causing rapid urbanisation and urban sprawl and increasing the demand for sanitary and environmental services by the residents. While local authorities need to attend to these urban challenges to sustain the growth and maintain the decent urban living standard, they are also expected to manage heat waves, torrential rains, floods and typhoons caused by global warming and climate change. The measures local authorities may take include mitigation of GHG emissions from industries, transportation, buildings and households, and adapting to the climate change impacts and natural disasters by transforming the urban infrastructures and designs to be more strong and resilient.

Many leaders and managers of local authorities in the region are aware of these new challenges, but the subjects are comprehensive covering multiple sectors, and require long-term planning supported by sufficient budgets, assignment of responsibilities and authorities with appropriate institutional setup for that. Thus, there is a gap to fill by a research institution by providing relevant practical knowledge, ideas, practices and policies based on experiences in other cities.

In order to deliver such services to local authorities, this component covers the following research contents in FY2014:

- Research on low-carbon projects and supporting policies particularly in management of energy, transportation, solid waste and water
- Capacity building support for measuring GHG emissions from the public sector and designing policies and projects to reduce them
- Research on policies to transform the design of cities including urban and land-use planning to be more resilient against natural disasters and climate change-related risks

【Major External Fund】MOEJ, ERTDF (MOEJ), JICA, Kitakyushu City

KUC_2: Action Research on Efficient Use of Local Resources

Predominantly, environmental challenges faced by cities in Asia and the Pacific are still related to management of solid waste, wastewater and air pollution. One proper way to manage these wastes and pollutants is to set up a system forcing the polluters treat them at source or pay for the treatment and management services which are enforced by laws and regulations and supported by regular environmental monitoring data. However, it is usually not the case in many developing countries and often waste treatment and management costs are borne by the local authorities, or simply left to the absorption capacity of the natural environment. To address these challenges, research institutions can play a role to fill the gap by recommending appropriate policies, regulations and systems to manage

the pollution, which regarded a top-down approach.

Another way to improve the situation is by recommending a cost-efficient community-based decentralised waste and resource management system for application on the ground, which regarded a bottom-up approach. Decentralised systems include solid waste separation at community centres including materials recovery facilities (MRF) and waste banks for selling recyclables, managing household hazardous waste and composting organic waste, and wastewater treatment by individual septic tanks (*jokaso*) and small-scale community systems. Efficient use of local resources also applies to energy extraction and compost and feedstock production from biomass and agricultural waste as well as managing energy demand and supply by a community-based decentralised system with renewable and underutilised energy sources including small-scale hydro, photovoltaic cells, winds, and waste heat from factories and facilities. Regional water resource management and forests and green space conservation in view of establishing a resilient city and improving adaptation capacity is also an area to be covered in this component.

Major components in FY2014 are:

- Promotion of resource efficient and 3R (reduce, reuse and recycle) policies at national level
- Promotion of decentralised community-based resource and waste management systems including organic waste and biomass utilisation and wastewater treatment
- Promotion of local resources management including water, forests and energy

【Major External Fund】MOEJ, ERTDF (MOEJ), JICA, Kitakyushu City

KUC_3: Networking with Cities and Other Organisations

Collaboration with local governments as well as supporting organisations including national governments, donors, development agencies, NGOs, and universities and research institutions, is an essential part of KUC's operation to enable its recommendations realistic, disseminate the findings and scale-up the pilot projects effectively. Networking among cities is an effective approach to improve managerial capacity of local authorities by facilitating mutual learning and emulation.

Since implementing the Kitakyushu Initiative for a Clean Environment (2000 – 2010), KUC has developed and maintained a network of environment-conscious local governments and their key stakeholders at multiple levels (local, national and regional). This asset was inherited into the development of the ASEAN ESC Model Cities Programme (2011 – present), a flagship initiative of ASEAN Working Group on Environmentally Sustainable Cities promoting development of leading environmental cities in each country. The Programme was developed from the recommendations of the 1st High Level Seminar on Environmentally Sustainable Cities in 2010 held under the East Asia Summit Environment Ministers Meeting (EAS EMM) framework and the progress in each country has been shared at the subsequent seminars which counts the fifth one in 2014. KUC serves as the secretariat of the both Programme and Seminar and using these platforms to facilitate networking and collaboration among the stakeholders. Major components in FY2014 are:

- Organising an annual High Level Seminar on Environmentally Sustainable Cities under the framework of the East Asia Summit Environment Ministers Meeting and reporting the outputs and progress at relevant regional meetings
- Assisting in the implementation of ESC Model Cities Programme in each ASEAN country by mobilising additional resources from other supporting organisations

【Major External Fund】MOEJ, Japan-ASEAN Integration Fund (JAIF), JICA, Kitakyushu City

KUC_4: Collaboration with Partners in Kitakyushu

In addition to and cross-cutting the above-mentioned three components, KUC, as a core constituent

of the Kitakyushu Low Carbon Center for Asian Society, has many collaboration projects with Kitakyushu City Government and related stakeholders, including JICA Kyushu, Kitakyushu International Techno-Cooperative Association (KITA), universities, NGOs and private companies, to extend sustainable city policies, practices, management systems and technologies to other cities in developing countries.

8. IGES Regional Centre (BRC)

IGES Regional Centre (BRC) focuses on capacity development of policy makers and key stakeholders through three networks and projects that BRC operates and implements from Bangkok. BRC strengthens these networks and raises funds as well as establishing a key operational base outside Japan to achieve IGES's mission.

Intended outcomes in the Sixth Phase are:

- Environmental performance and resilience is improved through increased capacity of policy makers and key stakeholders that are engaged in climate change adaptation, environmental compliance and enforcement, and sustainable development.
- Presence and involvement of IGES in environmental policy development processes in the Asia-Pacific and beyond is improved.

BRC_1: Networking and Capacity Development for Climate Change Adaptation

This task aims to provide the government officials and key stakeholders in charge of climate change adaptation in Asia-Pacific with learning opportunities through the operation of the Asia Pacific Adaptation Network (APAN) Regional Hub, one of the regional adaptation networks under the UNEP's Global Adaptation Network (GAN). APAN is the leading climate change adaptation network in Asia-Pacific region and its goal is to assist countries to build climate change resilient and sustainable human systems, ecosystems, and economies. APAN strives to equip key actors in the region with knowledge for designing and implementing adaptation measures, building capacity to access technologies and finance in support of climate change adaptation, and integrating climate change adaptation into policies, strategies and plans. BRC implements APAN's capacity development activities, and maintains and improves its knowledge sharing portal.

BRC also implements the USAID Asia Climate Change Adaptation Project Preparation Facility (Adapt Asia-Pacific) project. BRC leads the knowledge management component of the project as a partner institute. The Adapt Asia-Pacific aims to strengthen human and institutional capacity to prepare climate change adaptation investment proposals and sustain a regional knowledge platform to share and replicate best practices. This project collaborates with APAN.

This task ultimately aims at increasing the capacity of the government officials in charge of climate change adaptation policy development and implementation. Raising awareness and understanding will be achieved by knowledge sharing through the web portal, newsletters, and APAN's biannual regional Forum; capacity development for dealing with priority issues through workshops/conferences and communities of practices. Greater resource mobilisation is also expected through activities carried out by APAN and Adapt Asia-Pacific.

Major components in FY2014 are:

- Capacity building:
APAN will continue a series of capacity building workshops and training sessions aimed primarily at government officials so they can develop the knowledge and skills of to design, implement and evaluate adaptation actions and to acquire the financing and technologies to integrate adaptation into development planning processes. APAN is

planning to organise a regional forum (Adaptation Forum) in October 2014 in Malaysia. Adapt Asia-Pacific will organise a regional forum to increase the capacity of access to adaptation finance and adaptation project preparation in July 2014.

- Knowledge management:

BRC will continue maintaining and upgrading websites for APAN and Adapt Asia-Pacific to share good adaptation practices/lessons, adaptation technologies, and up-to-date information and news, issuing newsletters, and conducting online communities of practices to provide additional learning opportunities.

- Knowledge generation and networking:

BRC will synthesise useful knowledge and lessons on climate change adaptation, address emerging issues, and expand networks with other networks and initiatives to create larger impacts/synergy and increase the resource efficiency.

【Major External Fund】MOEJ, USAID

BRC_2: Networking and Capacity Development for Environmental Safeguards and Sustainable Development

This task provides learning opportunities to the government officials and key stakeholders in charge of environmental safeguards, environmental compliance and enforcement, and sustainable development, through activities organized by the Asian Environmental Compliance and Enforcement Network (AECEN) and the Network for Integrated Planning and Sustainable Development Strategies in Asia-Pacific Region (SDplanNet-AP).

AECEN is a network of environmental agencies in Asia dedicated to improving performance in relation to compliance and enforcement of national laws and multilateral environment agreements. SDplanNet-AP is a network targeted at helping development practitioners, including national and local government officials, and professional planners, share innovative approaches and good practices on how best to mainstream sustainable development priorities into local, sub-national and national policies.

This task ultimately aims at increasing the capacity of the government officials in charge of environmental safeguards, environmental compliance and enforcement, and sustainable development. Raising awareness and understanding will be achieved by knowledge sharing through the web portals, newsletters; capacity development for dealing with priority issues through the twinning projects and workshops/conferences. Resource mobilisation is also expected by these network activities.

Major components in FY2014 are:

- Capacity building:

AECEN will continue implementing two capacity development projects on environmental impact assessment (EIA) under ADB project (Japan-Sri Lanka and Japan-Lao PDR EIA twinning projects). SDplanNet-AP plans to attend and contribute to the global sustainable development forum to be organised by the United Nations Office for Sustainable Development (UNOSD) in April 2014 with the inputs from the regional discussion on sustainable development in Asia-Pacific and Africa.

- Knowledge management:

AECEN will continue developing the Environment Impact Assessment compendium under ADB project which hosts the inventory of the EIA laws, regulations, guidelines and case studies by AECEN member countries for mutual learning. Both networks will continue maintaining and

upgrading their websites to share good practices and up-to-date information for practitioners.

- Knowledge generation and networking:

AECEN plans to continue conducting case studies on short-lived climate pollutants to identify the needs and challenges of capacity development in environmental enforcement and compliance in developing countries. It will also explore the possible replication of good practices to other countries. SDplanNet will seek collaboration and synergy with related sustainable development activities and synthesize lessons and findings in Asia and the Pacific. SDplanNet will also assist in developing networks for sustainable development practitioners in Africa. BRC will continue preparing UNEP's environmental outlook for South Asia, Myanmar and Bhutan, contributing to GEO 6 preparation, and engaging in other regional activities to increase the knowledge base.

【Major External Fund】ADB, IISD, UNEP

BRC_3: Networking and Outreach

BRC will play a leading role in networking with overseas organisations especially those based in Bangkok, Thailand and its neighbouring countries. BRC hopes to serve as a window for IGES to explore possible opportunities for joint activities and other opportunities and to establish IGES's overseas operation base. It will also assist the PMO in coordinating IGES-wide activities including the White Paper series, fund raising, IGES-wide outreach, and knowledge management.

This task ultimately aims at strengthening IGES's branding and outreach that enables the Institute to generate larger impacts in the region.

Major components in FY2014 are:

- BRC will continue strengthening existing partnerships, as well as expanding and exploring potential partnerships with key stakeholders through the above network operations. It will also continue to organise informal seminars (Evening Café) inviting local practitioners in Bangkok.
- BRC will continue piloting communities of practices to seek a sustainable mode of knowledge management based on lessons learned. BRC will also continue its contribution to all-IGES and cross-Areas work.

9. Beijing Office

IGES Beijing Office aims to serve as an important bridge and a reliable platform between China and Japan to further promote environmental bilateral cooperation between the two countries. Specifically, the Beijing Office will contribute to holding regular policy dialogues between the Japanese and Chinese governments, and will also contribute to establishing environmental policies in both countries by participating in bilateral cooperation at the national level as the implementing body in the areas of water quality management, air quality management and climate change.

BJG_1 : Promotion of bilateral cooperation between China and Japan in the field of environment

This activity aims to strengthen the role of the platform so that the policy dialogues between the Japanese and Chinese governments (between Ministry of the Environment of Japan and Ministry of Environmental Protection of China and National Development and Reform Commission of China) will be held regularly, and, as a result, create a situation where joint projects, both new and continuous, between the two countries can be implemented smoothly.

In the area of water quality management, it is expected that, by implementing a joint project on total reduction of water pollutants, the results of the project will be disseminated, so as to ensure the construction during the period of the 13th Five-Year Plan starting from 2016 of wastewater treatment facilities with proper technology to reduce total emissions of water pollutants which were adopted in the model projects. It is also hoped that the water quality in rural areas in China will be improved. In addition, improvements are expected in the areas of air quality management and climate change, with air quality being improved by promoting the introduction of environmental technology from Japan.

Major components in FY2014 are:

- Area of water quality management:
Joint project on total reduction of water pollutants in rural areas
- Area of air quality management:
Joint project between cities in Japan and China to improve air quality in China
- Project on capacity building for climate change adaptation in China:
Capacity building in low-carbon model cities in China (training)
- Others:
Participation in Sino-Japan joint research activities in the field of environment
(cooperative projects at national level)
Support for IGES activities in China

【Major External Fund】 MOEJ

II. Strategic Operation

Aiming to achieve institution-wide targets, PMO will take the lead in promoting IGES strategic research and impact formation. PMO will carry out IGES-wide strategic planning and coordination, and proceed with comprehensive operations such as knowledge management, capacity development, quality assurance, networking, outreach, and fund raising in order to make timely and effective inputs into important policy processes.

1. Strategic Planning and Coordination of Overall Research Activities

The PMO will develop and facilitate an overall research strategy for IGES, from an integrative perspective. The Milestone Management System will be operated in a further effective manner, in collaboration with the Human Resource Section and the Account Section, for steady implementation and progress review of the strategic plan. Monthly Senior Staff Meeting (MSS) convening the top management and senior staff members including Area Leaders and Senior Coordinators will be further utilised for coordinating and facilitating integrative implementation of research activities.

2. Production of Flagship Products

PMO will cooperate with each area leader to conduct planning and coordination of key IGES flagship products, including the White Paper, a publication which delivers key messages on timely and strategic topics in the Asia-Pacific region to contribute to important regional and international processes. The IGES White Paper V, to be published in July 2014, will focus on regional integration and possible collaborations, considering ASEAN integration scheduled for 2015. The Flagship Team will also solicit initial ideas for IGES White Paper VI, to be published in 2016, from Area Leaders and other senior colleagues. In addition, the team is planning to propose a new flagship research activity with the potential to engage researchers from several areas.

3. Knowledge Management

Effective knowledge management aims to provide the support capacities needed for IGES researchers to fully optimise their roles and responsibilities. It also aims to encourage an institutional culture where knowledge production is highly valued, and where appropriate infrastructure allows for a greater accumulation of institutional expertise and business intelligence. To achieve these objectives, operations will first target further development of systems for knowledge creation, accumulation, management and utilisation across the institute for the benefit of IGES research staff. Second, operations will coordinate with the Secretariat and PMO to integrate the planning and administration systems in order to achieve a systematic accumulation of business intelligence and understanding of IGES expertise. Third, operations will continue to strengthen management and dissemination of IGES products and publications in line with our output database, external databases, and capacity development tools and products.

4. Capacity Development

In FY2014, Capacity Development will continue its dual focus on strengthening operations across the institution for provision of capacity development programmes and products to target key stakeholders both domestically and overseas, as well as an internal focus on building the capacity of IGES staff members to conduct high-impact research on cutting-edge and innovative topics. External capacity development operations will be coordinated under the guidance of an institutional strategy for capacity development; supported by the continued enhancement of sustainability tools and

solutions as well as the improvement of training/facilitation techniques utilised in such programmes. Furthermore, continued efforts will be taken to heighten IGES's profile as a capacity provider and trainer/facilitator. Internally, operations will continue to build staff capacity on effective research methods and strategic approaches for innovative research and effective dissemination/influence. Additionally, on-going development of opportunities for staff exchange, partnerships, collaborative research, and continuing professional development will be encouraged.

5. Quality Assurance of Research Outputs

In FY2014, PMO will continue to provide proactive facilitation which includes research methodologies in the early stages of output preparation towards improvement of the quality of final products

6. Networking

Planning and implementation of an integral networking strategy, including relationship-building with partner institutions and participation in key forums, will be carried out. In FY2014, coordination of multiple international and regional networking operations such as Low Carbon Society Research Network (LCS-RNet), Low Carbon Asia Research Network (LoCARNet) and Asia-Pacific Adaptation Network (APAN), Asian Environmental Compliance and Enforcement Network (AECEN), Asia-Europe Environment Forum (ENVForum), Regional 3R Forum in Asia, and Asian Co-benefits Partnership (APC) in which IGES research projects are involved will be strengthened for effective operation. In addition, the Sixth International Forum for Sustainable Asia and the Pacific (ISAP2014) will be organised in July 2014 to stimulate policy discussions with key stakeholders, both domestic and international ISAP2014 will focus on how Asia can implement sustainable development under resource constraints.

6-1 Knowledge Platform for Facilitating Sustainable and Low-carbon Societies

Forming low-carbon societies, which will be a basis for green economy, requires widespread transition spanning the spectrum from technical innovation to social system reform. Yet in order to promote such a transition in an integrative and efficient manner, it is essential to have a venue bringing together a wide range of research for exchanging information and sharing knowledge. IGES hosts the secretariats of two research networks meeting these needs: the International Research Network for Low Carbon Societies (LCS-RNet) and the Low Carbon Asia Research Network (LoCARNet), as open networks of researchers and research organisations facilitating the formulation and implementation of science-based policies for low-carbon societies and low-carbon development. In the Sixth Phase, in collaboration with other strategic operations such as Capacity Development and Outreach, LCS-RNet and LoCARNet will operate as a cross-area initiative to promote knowledge-sharing through annual meetings and other related meetings while utilising joint research for the further development of the relevant research community. The networks will also support the development of capacity in prominent young researchers, as well as policymakers through training opportunities.

【Major External Fund】MOEJ, Mizuho Research Institute Ltd, JICA

7. Outreach

In order to raise the visibility of IGES research outputs and improve IGES' reliability as an international research institute, it is essential to carry out effective and timely dissemination targeting appropriate audiences and building effective impact. Planning, coordination and implementation of a strategy for this purpose will be carried out through outreach activities, including publications, seminars and symposiums, campaigns, press activities, etc.

7-1 Information Dissemination through Publications and Periodicals

Through publishing Policy Reports and Briefs, IGES aims to disseminate its research results as policy recommendations in a timely manner. IGES will also continue to publish periodicals, such as annual reports, newsletters and “E-alert” (e-mail based newsletter) in order to relay IGES research and activities.

7-2 Information Collection and Dissemination Using Information and Communication Technology (ICT)

To provide more timely access to information on research outputs including strategic research activities and policy recommendations, the IGES website was redesigned in FY2013. Responding to the request of some domestic donors to increase IGES’s visibility in Japan, a special web-site for the Japanese general public will be designed in FY2014. To strengthen its function as a portal for collecting and providing information on events and environmental information in the dynamic Asia-Pacific region, IGES will continue to improve its web-site by effective information dissemination through the various databases managed by IGES. It will also continue to introduce international and regional initiatives and activities in which IGES takes part.

7-3 Information Dissemination through Seminars and Symposia

In coordination with related organisations and local governments, IGES will hold seminars and symposia targeting experts, businesses and the general public, aiming at the timely transmission of information gained from IGES research and research activities. Events will include:

- A series of “Global Environment Seminars” targeting a domestic audience and aiming to present the results of IGES research activities
- Seminars and symposia on environmental issues co-organised with local governments

7-4 Media Relations

Efforts will be made to communicate and disseminate research results through a third party such as media and related institutions, which will enable IGES activities to be recognised widely and will enhance its credibility as an international research institution. Activities will include:

- Holding press conferences and media round tables
- Sending out IGES research results such as Policy Briefs as press releases

8. External Funding

A proactive strategy for the acquisition of external funding will be planned and executed. Specifically, in active cooperation with domestic and overseas universities and research institutions, as well as with international organisations, a series of tasks for submission of joint proposals will be conducted. In addition, appropriate internal coordination will be carried out to respond to new funding opportunities both domestically and abroad, and necessary support will be provided in the process of preparation toward successful procurement of funds. Efforts to establish effective research teams in cooperation with universities and research organisations in Japan and overseas will be made, considering that, in most cases, IGES’s strategic research has come to be partnership-type research. Furthermore, strategic outreach activities for potential funding organisations should be promoted. FY2013 will focus on the following activities:

8-1 Domestic Fundraising

With regards to fundraising in Japan, in addition to acquiring research funds such as the Global Environment Research Fund and network-related budget as has been conducted up to now, the nature of funds should be diversified and include those from ministries other than the Ministry of Environment, such as the Special Accounts for Energy and the official development aid (ODA). In addition, more effort should be made to acquire research funds from the private sector.

8-2 International Fundraising

IGES will also make efforts to acquire increasing funds from non-Japanese sources. It aims to bolster its international credibility by strengthening linkages with international funding organisations, such as the World Bank and ADB, international organisations such as UNEP and the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), as well as bilateral donor organisations based in Europe and the US. The IGES Regional Centre in Bangkok is expected to play a more strategic role in this respect.

9. Contributions to Local Communities and other activities

9-1 Contributions to Local Communities

IGES carries out educational programmes that target local residents in cooperation with local governments and related organisations, in order to give the knowledge obtained through research activities and research back to the community, as well as to promote and facilitate understanding of IGES' research activities among the local community. Activities include:

- Holding the “Shonan Village Academia” (co-organised with the Kanagawa International Foundation).
- Participation in the “Shonan Village Festival” (sponsored by the Shonan Village Inc).
- Cooperation in educational programmes, implemented by the local government, which target local residents.
- Cooperation in school education in the region.

9-2 Management of affiliate membership organisations

IGES runs an affiliate members system to make use of a diverse range of opinions in its research activities, by promoting cooperation and coordination with various entities that recognise the importance of global environmental issues and endorse the activities of the institute, such as governments, businesses, educational institutions, NGOs, NPOs and citizens. IGES also hopes that this affiliate members system acts as a bridge to widen the circle of support for and understanding of IGES. When information is provided to affiliate members, we consider the impact that this has on the environment, and try to use electronic methods of distribution instead of the conventional distribution of publications.

III. Business on Special Accounts

1. Activities 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) 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 Dissemination and translation of two TFI Methodology Reports published in FY2013

The IPCC adopted and accepted, at its 37th Session in Batumi, Georgia in October 2013, two Methodology Reports produced by the TFI. They are the “2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands” and the “2013 Revised Supplementary Methods and Good Practice Guidance Arising from the Kyoto Protocol”. These two reports will be published in February 2014. In FY2014, the following activities will be implemented on these two reports:

- Dissemination of these Methodology Reports on various occasions such as the 40th Session of the Subsidiary Bodies of the UNFCCC in June 2014 and at the 20th Session of the Conference of the Parties to the UNFCCC in December 2014
- Support to the IPCC Secretariat in translating these Methodology Reports into 5 non-English UN languages

1-2 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 to supplement the IPCC inventory guidelines. In FY2014, 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
- Organisation of two data collection meetings on specific topics
- Organisation of the twelfth meeting of the EFDB Editorial Board

1-3 IPCC Inventory Software

This component aims to improve and upgrade the IPCC Inventory Software, the initial version of which was released in May 2012, and to support users of this software. This software is to implement calculation of emissions and removals of greenhouse gases according to the 2006 IPCC Guidelines. In FY2014, the following activities will be implemented:

- Rectification of bugs and errors detected in the current software
- Enhancement of functions in the software, for example by including tier 2 calculation modules
- Development and inclusion of an additional module to implement calculation according to the 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas inventories: Wetlands

- Provision of technical support to users on request
- Holding an international expert meeting for the promotion of Software use

1-4 International Expert Meetings on Greenhouse Gas Inventories

This component aims to organise IPCC expert meetings and publish their results. The Bureau of the TFI, at its 25th meeting in July 2013, considered future activities of the TFI and concluded it was highly likely that the TFI would need to undertake a new project in 2015 to revise the 2006 IPCC Guidelines for National Greenhouse Gas Inventories with a view to complete this by late 2017 or early 2018. The Bureau of the TFI also concluded that some work preparatory to this project would need to be initiated in 2014. To this end, the following two expert meetings will be organised in FY2014:

- Expert meeting on application of 2006 Guidelines to other areas
- Expert meeting on systematic assessment of TFI products

1-5 Support to the Bureau of the TFI

This component aims to support the Bureau of the TFI in fulfilling its function. In FY2014, the following activities will be implemented:

- Holding the 26th meeting of the Bureau of the TFI

1-6 Collaboration with other organisations

This component aims to collaborate with other organisations on inventory-related matters. The TSU will continue contributing to inventory-related capacity building programmes implemented by other organisations such as UNFCCC, United Nations Development Programme (UNDP), National Institute for Environmental Studies (NIES), and Japan International Cooperation Agency (JICA) by sending programme officers as resource persons and providing inventory-related materials developed by the IPCC TFI. Also, the TSU will interact with other organisations or initiatives such as Global Forest Observation Initiatives (GFOI) and Food and Agriculture Organization (FAO) to assist inventory compilers in data collection. The TSU will also collaborate with other projects in IGES, where appropriate, on matters relating to estimation of greenhouse gas emissions and removals.

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

The 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 strengthen interactions between the science community and decision makers. In order to support and develop the scientific capacity of scientists in the field of global change research, especially in developing countries, APN is planning to conduct the following activities in FY 2014:

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

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

The APN will support international research projects selected by the 19th Inter-Governmental Meeting (IGM), to be held in Siem Reap, Cambodia, in March 2014.

(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, early-career scientists and practitioners, in particular in developing countries. These activities will also be selected through a competitive call for proposals.

2-2 Inter-Governmental Meeting and Other Meetings

APN will conduct its 20th Inter-Governmental Meeting (IGM) and Scientific Planning Group (SPG) Meeting around March 2015 (Country host: not yet decided).

2-3 Others

(1) Focused Activities

In order to respond to the increasing need of sound scientific knowledge to support far-reaching policy- and decision-making, APN established frameworks in areas of particular interest and priority to its Member Countries:

- Low Carbon Initiatives Framework (LCI);
- Climate Adaptation Framework (CAF); and
- Biodiversity and Ecosystem Services Framework (B&ES).

These frameworks have been established to enhance science-based activities of APN developing countries and comprises the following components:

- Regional research programme that has a capacity building element;
- Capacity building programme (including projects at national and sub-national scales); and
- Activities co-organised and undertaken with other partner organisations and networks.

APN will continue to conduct activities within these Frameworks, together with its member countries and partners in FY 2014.

(2) Active Participation in the Discussion on Future Earth

Broad and strategic discussions among partners and stakeholders are necessary in order to help Future Earth to be implemented properly. The APN will continue to proactively participate in these discussions through its network of policy makers and scientists in the Asia-Pacific region.

(3) Science Policy Dialogue

The APN will continue to conduct activities to strengthen dialogue between policy makers and scientists in the Asia-Pacific region. In October, 2014 a Science-Policy Dialogue is scheduled to be held in India, for the APN South Asia sub-region.

(4) APN 3rd Strategic Phase Report and 4th Strategic Plan

A comprehensive review of the activities conducted by the APN during its 3rd Strategic Phase

(2010-2015) is in preparation. In 2014 (summer), a workshop of key APN members, including the Task Committee, will convene to write a draft strategic plan based on the outputs of the 3SP report as well as developments in the field of global environmental change. Based on the results of the 3rd Strategic Phase Report, the APN's decision-making organ, the IGM, will discuss and decide on its strategies that will be outlined in its 4th Strategic Plan. The Plan is expected to be finalised and adopted at the 20th Inter-Governmental Meeting.

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

Aiming to realise a sustainable society and biodiversity conservation through ecological study, JISE conducts practical research into the restoration and creation of ecosystems from the regional to global level; JISE also offers training programmes for ecology and nature restoration, and collects and provides environmental information. JISE will implement the following activities in FY 2014:

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, Kenya, Uganda and Cambodia)”, “Actual and Potential Natural Vegetation in Asia and the Pacific (Thailand and East Japan)”, “Vegetation Science Research Related to Conservation of Biodiversity” (Tokai and Tohoku regions of Japan)” and “Structure and Dynamics of Regional Ecosystems including their Evaluation” (Japan and overseas). In particular in FY2014, JISE will continue to implement a research project called “Ecological Study for the Restoration of Coastal Forest in the Tsunami Stricken Area” supported by research grant, and push ahead with multilateral research, 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 and monitoring study.

Based on the above research, JISE makes proactive social contributions in partnership with many other institutes and organisations by promotion of replanting disaster-prevention and environmental-preservation forests based on potential natural vegetation, which contribute to global climate change policy, conservation of biodiversity, disaster prevention in mountainous and coastal regions, and restoration of forests for water source recharge; 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

JISE will carry out “Ecological training” targeting citizens, students, the staff of businesses, NPO and government offices that are currently planning or implementing ecological restoration and environmental conservation projects, with the ultimate goal of acquiring basic ecological knowledge about establishing forests for environmental conservation. Furthermore, JISE will implement capacity building projects aimed at the general public, such as lectures to direct tree planting and forest creation, and environmental learning to enhance ecological nature cognition, to contribute to the recovery and protection of the environment.

3-3 Interaction

JISE will continue to update its database of information regarding phytosociological data (composition, structure and vegetation units) through its website. 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 activities which introduces its own activities as well as the efforts of private companies in environmental conservation. JISE also distributes newsletter and publishes “Eco-Habitat: JISE research”, a bulletin containing both domestic and international results about ecology, which will be available on the internet. It also plans and implements numerous tours to carry out forest restoration overseas, such as the Cambodia Eco-tour (to take place in April).