

**Mid-term Review on Integrative Strategic Research Programme of IGES  
for the Sixth Phase:**

## TABLE OF CONTENTS

<b>1. Introduction.....</b>	<b>1</b>
<b>2. Overall performance of IGES in the first half of the ISRP6.....</b>	<b>1</b>
2-1 Overall assessment.....	1
2-2 International Recognition of IGES .....	1
2-3 Impact generation .....	4
2-4 Production of Outputs.....	9
2-5 Financial Status .....	11
2-6 Human Resources Management.....	14
2-7 Conclusions.....	16
<b>3. Review of the Area/Task Activities .....</b>	<b>18</b>
3-1. Climate and Energy Area (CE) .....	18
3-2. Sustainable Consumption and Production Area (SCP) .....	25
3-3. Natural Resources and Ecosystem Services Area (NRE).....	32
3-4. Green Economy Area (GE) .....	39
3-5. Business and Environment Area / Kansai Research Centre (KRC).....	47
3-6. Integrated Policies for Sustainable Societies Area (IPSS) .....	51
3-7. Sustainable Cities Area / Kitakyushu Urban Centre (KUC).....	59
3-8. IGES Regional Centre (BRC).....	64
3-9. Beijing Office (BJG) .....	69
<b>4. Review of IGES Management.....</b>	<b>73</b>
<b>4-1 PMO .....</b>	<b>73</b>
(1) Overall Planning and Coordination .....	74
(2) Flagship Initiatives.....	79
(3) Outreach .....	80
(4) Networking .....	82
(5) Quality Management .....	82
(6) Capacity Development (for external stakeholders).....	84
(7) Knowledge Management .....	85
(8) Capacity Building (internal) .....	85
<b>4-2 Secretariat.....</b>	<b>87</b>
(1) Human Resources Management.....	87
(2) Accounting Section .....	89
(3) General Affairs .....	90
(4) Overall Secretariat .....	91

# 1. Introduction

The Board of Directors' meeting held in June 2013, which discussed the Implementation of the Integrative Strategic Research Programme for the Sixth Phase (ISRP6), requested a mid-term review in the second year of the phase, due partly to the fact that the duration of one phase was to be extended to 4 years. This document is intended to address this request made by the BOD.

Basic objectives of the mid-term review are:

- (i) To review the progress made so far against the various goals and targets included in ISRP6,
- (ii) To propose revisions to ISRP6, where necessary, and
- (iii) To lay a basis for the Business Plan for FY2015, and the following year.

## 2. Overall performance of IGES in the first half of the ISRP6

### 2-1 Overall assessment

ISRP6 introduced a very clear vision for IGES to become an **agent of change** to contribute to making Asia and the rest of the world more sustainable. ISRP6, therefore, made it clear that impact generation is IGES's most important objective.

Keeping this in mind, quite a variety of activities have been carried out ranging from strategic policy research and analysis, networking and partnership operations, to institutional development. As a result, international visibility of IGES as an institute for sustainable development has substantially improved. The amount of external funds has significantly increased, and delivery of products has become timelier accompanied by improved quality.

At the same time, there remain quite a few challenges confronting IGES. The overall level of the core fund continues to decline, thus, the need to further expand external funds is now even more pressing. Efforts made by researchers and other staff members have naturally increased for fund raising and delivery of the products required. Nevertheless, IGES has to generate more of its original products, which are value added as a leading institute to promote sustainability in this rapidly changing world. Indeed, IGES needs to be more effective in creating value added products and meaningful impacts, as well as more efficient in managing the institute.

The details of the progress made so far and future actions to be taken will be discussed in the following sections one by one.

### 2-2 International Recognition of IGES

International recognition of IGES is quite an important indicator for IGES to truly become an agent of change. Attention paid to IGES products will increase, impact generation could be more likely, and chances of getting external funds will expand. In this respect, some significant improvements have been made over the last two years.

The International Center for Climate Governance (ICCG) in Europe, in June 2014, ranked IGES 15 (fifteen) in the world climate think tanks<sup>1</sup>, which is the highest ranking among all Japanese institutions. This is significant, because climate change is the most important issue within IGES, on which more than a half of all IGES operations are concentrated.

The University of Pennsylvania, US, released its annual ranking of global think tanks<sup>2</sup> for several important areas, including the environment. IGES was ranked 38 in the environment category among 6,500 environmental think tanks across the world. This ranking was the highest for Japanese institutions and an improvement from 48, which was the ranking for the previous two years.

**Table 1: IGES in Rankings: FY2012 - FY2014**

	FY2012	FY2013	FY2014
GLOBAL GO TO THINK THANK by University of Pennsylvania	48	48	38
ICCG Climate Think Tank Ranking by the International Center for Climate Governance	-	15	(not yet published)

**(1) Media coverage**

In FY2014, IGES activities received more attention from the Japanese media, compared with the previous two years as shown in Table 1. The topics covered by the Japanese media were significantly diversified in FY2014. In addition to how IGES contributes to addressing serious air pollution issues in China, topics such as “Green Gift”, and “Low Carbon Navigator” were taken up in FY2014.

It is important to note that this increase is at least partially due to focused efforts made jointly by the research divisions concerned and the outreach team of PMO. As the result, J-CLP activities, for example, were picked up by 15 media outlets within the space of only 3 months.

The media coverage in English and other languages has also shown an increase over the last three years. This could be partly attributed to the fact that some IGES work attracted attention from the local media, in the regions where the activities were carried out.

<sup>1</sup> 2013 ICCG Climate Think Tank Ranking (June 2014): IGES was ranked 15th in absolute terms among 210 independent think tanks in the world.

<sup>2</sup> 2014 Global Go To Think Tank Index Report (Jan. 2015)

**Table 2: Media Coverage in FY2012 - FY2014**

	FY2012 (April-December 2012)	FY2013 (April-December 2013)	FY2014 (April-December 2014)
In Japanese	64	91	107
In other languages	10	14	17
<b>Total</b>	<b>74</b>	<b>105</b>	124

*\* The number includes coverage by newspapers, magazines, TV and radio broadcasts, and web-media. The number also includes contributing articles, which were accepted and published on newspapers and magazines.*

*\* The coverage on networks for which IGES serves as the secretariat is also included in the amount of media coverage for IGES.*

## **(2) Downloads from IGES Website**

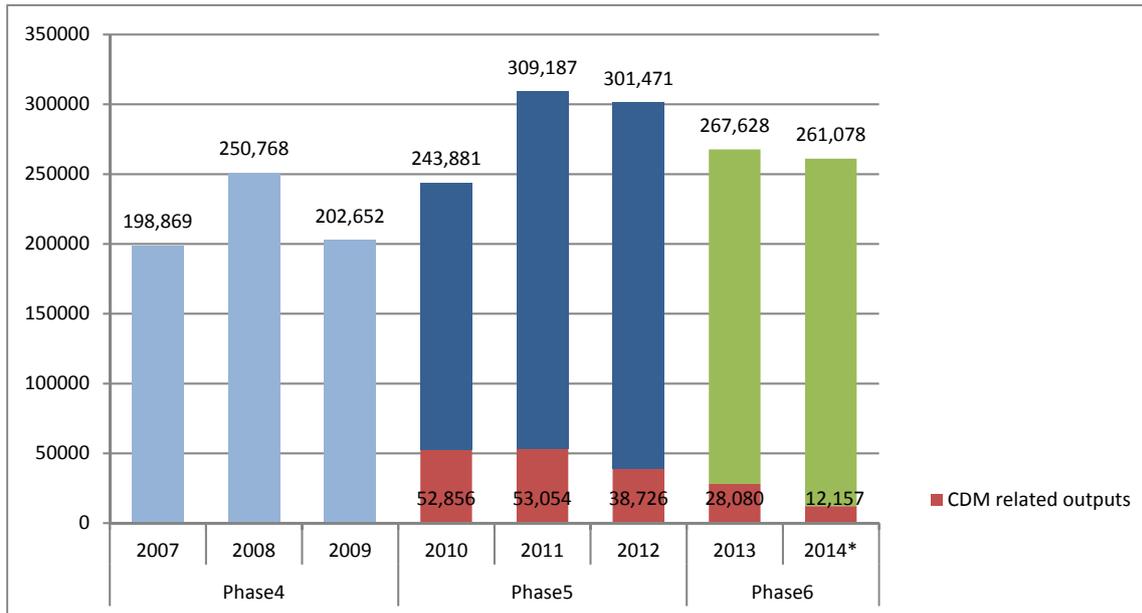
The number of downloads (DL) from IGES publications including databases is shown in Figure 1 below. By and large, the number shows a stable trend, and FY2014 is likely to see some increase over that of the previous year, since the number shown below covers only the first nine months of the fiscal year.

The slight decrease in DL from 2011 does however merit some explanation. One of the possible reasons includes the decision on Kyoto mechanisms<sup>3</sup> in December 2012 at UNFCCC COP18, to restrain the use of market mechanisms such as CDM. As a matter of fact, the DL from the series of IGES CDM databases has dropped significantly as shown in the Figure below: about 40,000 decrease from the levels of FY2010 and FY2011.

The recent trend is an increase in access to new practical tools and manuals developed by IGES. Also publications written in Indonesian received a high number of DL. These actually reflect the more diversified products that IGES has been producing recently.

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<sup>3</sup> A series of decisions made at COP18 to the United Nations Framework Convention on Climate Change (UNFCCC) in Doha, Qatar resulted considerable restrictions on the use of the Kyoto mechanisms by countries that do not submit greenhouse gas reduction targets for the second commitment period of the Kyoto Protocol, including Japan.



**Figure 1: Download of IGES Research Products (FY2009-FY2014)**

*\* Numbers for 2014 is as of December 2014*

### (3) Future challenges

In order to improve international recognition further, several measures have to be taken in an integrated manner. First, more attractive products have to be produced and internationally shared. Value added products on politically important questions could be quite important, but equally important could be joint publications with partner institutes and experts. Second, promotion of, and participation in, international and regional networking activities for knowledge sharing could be very effective. It should be noted IGES has been a leading agency in Asia in this respect. Third, media relations should be strategically strengthened. One effective way to do this is through timely introduction and analysis of internationally important negotiations and publications. IGES has already started this line of action, for COP and IPCC meetings, and important publications such as the New Climate Economy and the Deep Decarbonisation Pathways Project (DDPP). Lastly, the IGES website has to be improved further, always making sure that it is user-friendly.

## 2-3 Impact generation

IGES identified itself as an “Agent of Change” in its ISRP6, by making “impact generation” its ultimate objective. Since then, much internal discussion has taken place, and specific targets for impact generation were identified in its Milestone Management. As a result, cases where specific impacts are created by IGES have significantly increased.

Specific impact cases are provided below for FY2013 and FY2014. As indicated below, impacts have been generated in a few different ways. They include impacts created (i) through proposals for improved policies, planning, and practices, (ii) through provision of sound guidelines, (iii) through

provision of tools, (iv) through network operations, and (v) through pilot projects. As IGES accumulates more experiences on impact generation, much deeper thinking is likely to emerge regarding effective and sustainable impact generation.

For each one of the specific impacts, substantial efforts were made by staff members concerned. For example, intensive lobbying and coordination with political parties, media, and ministries concerned was necessary to have the “Green Gift” concept integrated actual taxation policy in Japan. In the case of establishing a collaborating centre for the International Environmental Technology Center of UNEP, significant and lengthy efforts were also needed to iron out the details for agreements with all organisations concerned. For both cases, a kind of special team was formed to deal with these substantial workloads. It is, thus, critical for IGES to develop a system in which all efforts made by staff members concerned should be fairly evaluated.

### **FY2013**

*(Through Proposal for Improved Policy/Planning/Practice)*

- **”Green Gift” Short-listed for Deliberation in the National Tax Reform Plan:**  
The IGES proposal ”Green Gift” provoked national level discussion on an innovative mechanism to mobilise personal assets for accelerating financing for low-carbon investment in Japan. It has received considerable attention as a practical policy proposal and was included in items for deliberation in the FY2014 Taxation Reform Principles.
- **Draft UNEP SCP Strategy for Inter-UN-agency Coordination and Discussions:**  
UNEP mandated IGES to develop its Global Strategy for Sustainable Consumption and Lifestyles for the next 10 years for the use of inter-UN-agency coordination and discussions.
- **Japan Decided to Lead SLE Component of SCP10YFP:**  
IGES contributed to the Ministry of the Environment, Japan (MOEJ) in deciding on a major contribution to Sustainable Lifestyle and Education (SLE) component of the 10YFP. Also the IGES president was requested to participate in the SCP 10YFP as a board member and representative of the Japanese government.
- **Thailand launched T-VER Program:**  
The Government of Thailand officially launched the “Voluntary Emission Reduction Program (T-VER)”, for which IGES gave its support to government officials by way of a capacity building programme.

*(Through Provision of Guidelines)*

- **UNFCCC EB on CDM Adopted Standardised Baseline:**  
The 76th meeting of the Executive Board of the Clean Development Mechanism (CDM) adopted the standardised baseline “Technology switch in the rice mill sector of Cambodia” which was established based on a joint proposal from the Ministry of the Environment of Cambodia and IGES.
- **Risk Assessment Guidelines for Chinese Tropical Hardwood Importers:**  
The IGES report “Managing forests as a renewable asset for present and future generations: Verifying legal compliance in forestry in Papua New Guinea” was used by The Nature Conservancy (TNC) to draft risk assessment guidelines for Chinese buyers of timber from Papua New Guinea (PNG).
- **A Core Set of Indicators on the 3Rs:**  
A core set of indicators on the 3Rs developed by IGES and its partners introduced at the 5th Regional 3R Forum in Asia and the Pacific. The indicators will serve as the basis for 3R policy development and implementation in respective countries in the region.

*(Through Provision of Tools)*

- **A Wide Range of Stakeholders Use – IGES CDM Database:**  
IGES developed a number of CDM-related database series, and closely cooperating with UNFCCC Secretariat to synchronise the CDM data to enhance the quality of data and its analysis for the public. For example, Kansai Electric Power Company and Nissan Motor Company, as well as multi-lateral banks and the World Bank cited the IGES CDM Database for the estimation method of CER issuance.
- **Japan 2050 Pathways Calculator – a low-carbon scenario simulation tool:**  
A proto type of Japan 2050 Pathways Calculator (2050 Low Carbon Navigator) is being developed in collaboration with the National Institute for Environmental Studies (NIES) with support from UK embassy and Ministry of the Environment of Japan, as a low-carbon scenario simulation tool to help discuss and select among various options regarding energy supply and demand and GHG mitigation.
- **MRV on Transport-related GHG Emissions:**  
Tools and methods to measure, report and verify (MRV) transport-related greenhouse gas (GHG) emissions were developed and shared with five cities in the Asia Pacific; and a larger group of stakeholders via an e-learning short course.

*(Through Network Operations)*

- **Thailand developed NAMAs Strategy (LoCARNet):**  
The government of Thailand developed their strategy on NAMAs supported by the scientific knowledge provided from LoCARNet in collaboration with the Thai Greenhouse Gas Management Organization (TGO). IGES has been serving as the Secretariat of LoCARNet.
- **The city of Iskandar, Malaysia Implements a Low-Carbon City Plan (LoCARNet):**  
The city of Iskandar, Malaysia prepared and implemented a low-carbon city plan. LoCARNet provided supporting capacity for both the plan's development and implementation, as well as helping to establish collaboration among local universities and implementing organisations.
- **Asian Five Cities Develop Low-Carbon Action Plans (ASEAN ESC Model Cities Programme):**  
IGES supported the development of low-carbon action plans in Asian five cities (Surabaya, Indonesia; Ho Chi Min City, Viet Nam; Nonthaburi and Phitsanulok, Thailand; and Cebu, the Philippines)
- **GAN built upon prior Regional Initiative of APAN:**  
Initiated by UNEP, officially launched at the COP19, the Global Adaptation Network (GAN) consists of three sister regional climate change adaptation specialised networks: Asia Pacific Adaptation Network (APAN) and ones for Latin and Africa. IGES has been serving as the Regional Hub for APAN.

*(Through Pilot Projects)*

- **Indian SME Pilots Japanese Low-Carbon Technologies:**  
A pilot project to test the feasibility of installing Japanese low-carbon technologies in Indian small and medium-sized enterprises was completed, which created the basis for further enhancement of technology low-carbon transfer/application. Technologies applied include Gas and Electric heat pump technologies and a compressed air system.
- **Wastewater Treatment Model Facilities in Rural China:**  
Household-origin wastewater treatment model facilities have been installed in around 10 small towns in rural China, the findings from which will be reflected in the national guidelines.

- **China-Japan Inter-city Cooperation for Air Quality Improvement:**  
A draft framework of China-Japan inter-city cooperation for air quality improvement was developed and proposed to respective central and local governments.

## **FY2014**

*(Through Proposal for Viable Actions on Policy/Planning/Practice)*

- **”Green Gift” adopted in Japan – FY2015 Tax Reform Package:**  
The Government of Japan adopted the Green Gift Scheme proposed by IGES and will implement it through the FY2015 tax reform package. The scheme designed to support domestic renewable energy investment was listed in FY2014 tax reform package as an item for further consideration. A series of follow-up activities including a public symposium, policy dialogues, media coverage/articles and other PR activities has provoked a national level discussion and led to its adoption in the FY2015 package.
- **Taking the lead in UN Decade Programme – SCP 10YFP:**  
IGES has been invited to play the leading role in guiding the Programme of Sustainable Lifestyle and Education (SLE) component of SCP 10YFP. IGES President continues to serve as a board member of SCP 10YFP on behalf of the Government of Japan.
- **OECD promotes EPR Policy:**  
Extended Producer Responsibility (EPR) policy has been promoted by OECD with updating of the OECD EPR Guideline for Working Party on Resource Productivity and Waste. IGES has been providing substantive inputs, such as provision of findings and recommendations from EPR case studies on the home appliance recycling law in Japan.
- **National Strategic Plan on Food Waste Management piloted in Malaysia:**  
National Food Waste Management Strategy was developed with longstanding support from IGES and officially approved by the Ministry of Urban Wellbeing, Housing and Local Government in 2014 and will be sent to the Cabinet Office for final approval. The Strategy is piloted by selected companies in Malaysia for initial data collection.

*(Through Provision of Guidelines)*

- **Mainstreaming of Community-based Forest Management:**  
Community-based Forest Management has been promoted in the region through the wide use of IGES tools and guidelines by the practitioners and training communities, such as the ‘Training Manual on Community-based Forest Biomass Monitoring’
- **JCM Manuals Made Available in Vietnamese:**  
The Joint Crediting Mechanism (JCM) operation manual - a text book in CHARTS style and the training manual for validation and verification applicable to all the signatory countries was developed by IGES and will be utilised for the operation of the JCM. Needs for the manual prepared in multiple languages requested by JCM participating countries. The manuals are now available in Vietnamese.

*(Through Provision of Tools)*

- **The Japan 2050 Low Carbon Navigator Launched at ISAP2014:**  
The Japan 2050 Low Carbon Navigator was launched and is now available on the IGES website, attracting a wide-range of stakeholders, including governmental organisations (MOEJ and METI), the academia, the NGOs, and university students and related associations. The Navigator is designed as an easy-for-communication simulation tool supporting policy discussions/dialogues has been subject to many media coverage/articles since its launch in summer 2014.
- **ILO mapped Green Jobs Potentials in Selected Asian Countries:**  
ILO completed green jobs mapping in Malaysia, the Philippines and Indonesia. IGES joined ILO Green Jobs Programme and Green Jobs in Asia and the Pacific Project to support ILO

establishing their quantitative methodology for green job mapping, i.e. employment and environment-extended green DySAM.

- **Quick Assessment Tools for municipal solid waste and SLCP emissions:**  
Tools for quick assessment of municipal solid waste and Short-Lived Climate Pollutants (SLCP) emissions were developed by IGES and acknowledged under the CCAC Municipal Solid Waste Initiative (MSWI). Tools and capacity development workshops are designed to support municipal decision makings, through which co-benefit approach on climate and 3Rs nexus will be promoted at a municipal level.

*(Through Network Operations)*

- **Y-PORT Center for Urban Climate Challenges:**  
Yokohama Partnership of Resources and Technologies (Y-PORT) Center will be established where IGES will be the part of platform along with the City of Yokohama, city network and private sectors in order to address emerging issue of urban climate change resilience in Asian cities while promoting city-to-city collaboration, knowledge sharing, and the implementation of pilot projects for smart and future cities.
- **IGES Centre Collaborating with UNEP on Environmental Technologies:**  
UNEP and IGES agreed to set up IGES Centre Collaborating with UNEP on Environmental Technologies with its initial focus on CCAC MSWI-related issues to be launched in 2015.
- **National Programmes in Action - ASEAN ESC Model Cities Programme:**  
ASEAN ESC Model Cities Programme provided boost to the implementation of National ESC programmes in 8 ASEAN countries. Amongst others, Cambodia, Viet Nam and Myanmar have significantly strengthened their national activities.
- **Preparation of UNFCCC Regional Collaboration Center in Asia:**  
The scope and activity of the regional collaboration centre for the UNFCCC (UNFCCC RCC) has been discussed since June 2014. A regional joint workshop by IGES-ADB-UNFCCC on the Market Mechanism in Asia was successfully organised in Bangkok emphasising the importance of capacity building in the region.

*(Through Pilot Projects)*

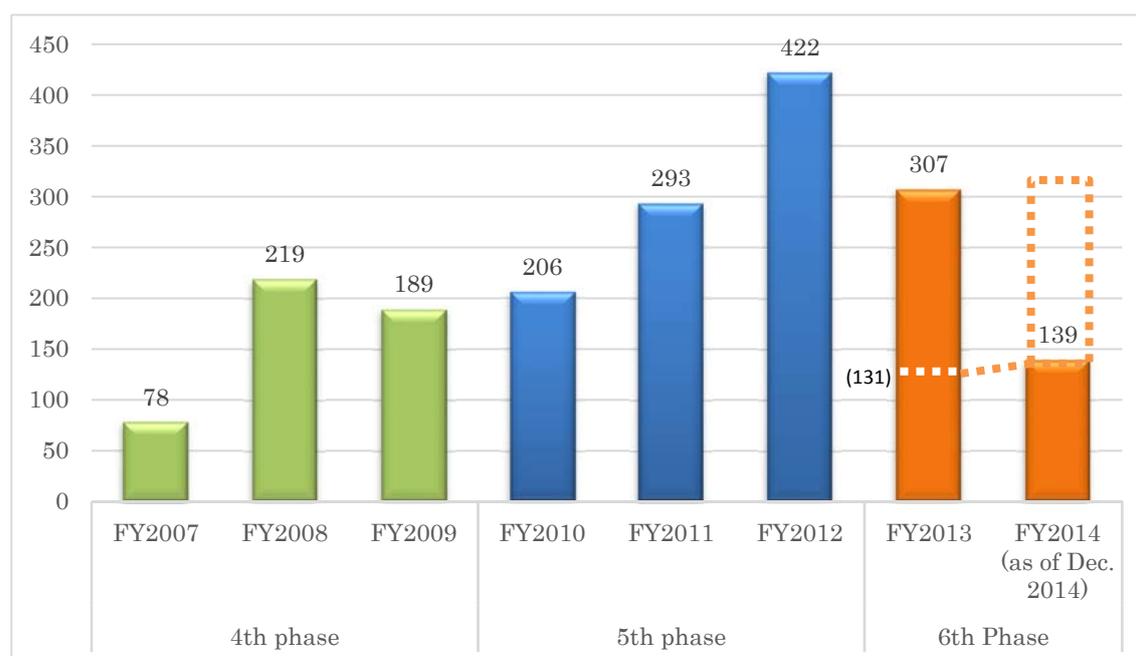
- **Silang-Santa Rosa River Basin Looks into Adaptation-Mitigation Integration:**  
Local governments at the Silang-Santa Rosa River basin in the Philippines initiated inter-municipality coordination to enhance local Comprehensive Land-use Plans with climate consideration, working together with IGES on a pilot project on integrated approach to mainstream adaptation-mitigation concerns into local development planning.
- **JICA-SIDBI Adopted Low-Carbon Technologies Commended by IGES:**  
JICA-SIDBI included the heat pump technologies recommended by IGES in their financing eligibility list based on the success cases proven by IGES-TERI low-carbon technologies installment in Indian small and medium-sized enterprises
- **Asian Cities Pilots Low-Carbon Projects (JCM City-to-City Collaboration Scheme):**  
Advanced cities in Asia developed and implemented low-carbon projects through JCM city-to-city collaboration scheme and other arrangement mediated by IGES, namely Surabaya (Indonesia), Cebu (the Philippines), Cat Ba Island in Hai Phong (Viet Nam) and cities in Palau.
- **Wastewater Treatment Model Facilities in Rural China:**  
Eleven (11) model facilities were installed in nine regions, demonstrating the effective waste water treatment in rural areas in China. IGES served as an effective platform to facilitating stakeholder cooperation at local and national levels. Policy recommendations as inputs to national guidelines are under way.
- **China-Japan Inter-City Cooperation for Air Quality Improvement:**  
Ten (10) local governments in Japan started communication and cooperation with respective Chinese counterpart cities on air quality management, with substantive support from IGES.

## 2-4 Production of Outputs

### (1) Total number of outputs

The total number of outputs by itself is not a good indicator of impact generation, but nevertheless, it is an important indicator for productivity. The current total number of publications for FY2014 appears on track to meet or surpass that of the previous year, as a significant number of publications tend to appear at the end of the fiscal year.

From the Fourth to the Fifth Phases, there was an overall increasing trend in the total number of publications. In the first year of the Sixth Phase, FY2013, the total number of publications did not reach the record high level of FY2012, but it surpassed the second highest level of FY2011. This could be attributed to factors such as the significantly substantial time needed to secure external funds, i.e. writing proposals, major organisational changes, personnel reassignment to new and unfamiliar areas, and a shift away from research-oriented projects to other kinds of activities such as capacity building and managing networks.



**Figure 2: Numbers of IGES Publications (FY2007-FY2014)**

(Numbers in bracket are as of December 2013)

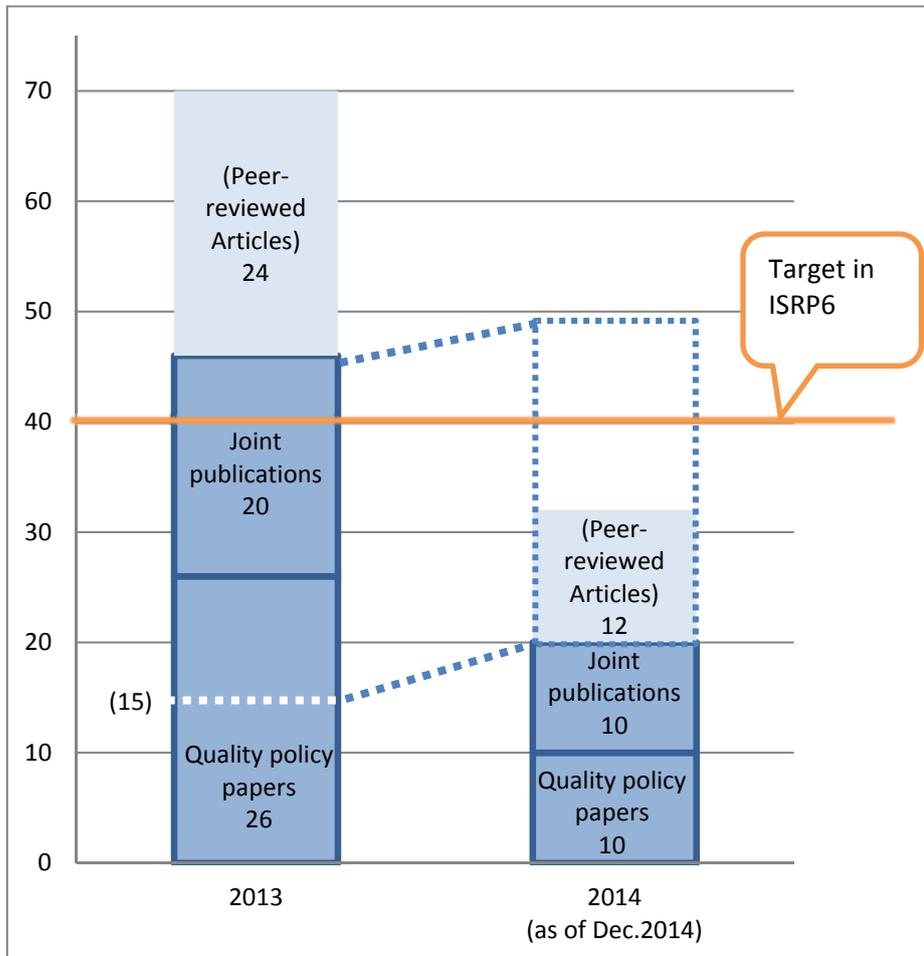
\*\* *Nine chapters of IGES White Paper 4 are included in FY2012 and are counted individually*

\*\*\* *Number of publications includes different language versions.*

### (2) Quality outputs

IGES distinguishes “quality” outputs which undergo more extensive review procedures compared to others. These include some IGES publication types (policy briefs, policy reports, research reports) as well as peer reviewed journal articles and products.

The ISRP6 set a target regarding the overall production of quality policy papers at 40 per year during the Sixth Phase, for a total of 160 over 4 years. This target was exceeded in the first year by six, and it seems the number of quality publications for FY2014 is projected to be about the same or more than the target level.



**Figure 3: Numbers of ‘Quality Papers’ (FY2013-FY2014)**  
(Numbers in bracket are as of December 2013)

\* ‘Quality policy papers’ includes policy briefs, policy reports and Research Reports.

\*\* Number of publications includes different language versions.

Attention needs to be paid to the fact that the number of quality publications has been largely at the same level for the last five years. The main reason seems to be linked to the substantial increase in efforts made to secure external funds. Competition has become more severe, which resulted in those staff concerned spending an increasing amount of time on proposal writing. Further various reports need to be prepared according to the contract concluded. In fact, this was clearly indicated by a very large increase in the number of commissioned reports (almost doubled from FY2012 to FY2013).

It is worthwhile to note a change in how quality papers have been produced in recent years. A

growing number of quality policy papers in IGES are currently produced as products under joint international forums and publications. The number of such papers is 20 and 10 for FY 2013 and 2014, respectively.

As impact generation is the ultimate goal of IGES, the Institute has maintained a policy of keeping a sound balance between policy-oriented publications and research-oriented publications. In FY2013 and FY2014, more than 80 percent of all publications were classified as policy-oriented, which is basically in line with the past trend. The number of peer reviewed journal articles was 24 in FY2013, and 10 for FY2014 as of the end of December.

### **(3) Future challenges**

The most important challenge is to link outputs more closely with influence generation to support the role of IGES as a change agent. In the 6<sup>th</sup> Phase, researchers have been strongly encouraged to develop outputs with a specific target audience and influence strategy. This includes not only written outputs, but also others such as workshops and networks. Many publications now have much clearer objectives than before, and there are clearer ideas for using them. Nevertheless, the influence generation strategy for some activities and outputs is not always clear. At the same time, it is also important to increase productivity to ensure more timely outputs for specific policy processes. In the future, as competition intensifies for external funds – not only international but also domestic – the importance of quality, value-added, and timely delivery will also increase. In general, questions such as the appropriate number and type of publications, level and type of quality expected, time allocation, and human and financial resource commitments need to be more closely linked with clear impact generation strategies. Different kinds of publications with different types of quality are needed for different target audiences. A one-size-fits-all approach will not be effective for the diversified activities of IGES. Both quality and productivity can be addressed through more careful planning using the Milestone Management system, to ensure that each output has a clear purpose and feasible strategy, sufficient human resource allocation, and a realistic timeline. Clean production methods should be more widely applied, and will be fully applied especially for flagship publications. Additional internal capacity building is also needed, to be facilitated through some kind of mentoring by area leaders and other senior staff, and internal workshops and study groups. Lastly, financial incentives should be considered for those staff members, who have successfully prepared good quality papers, for which a ranking scheme should be set up.

## **2-5 Financial Status**

(Note: The figures of FY2014/ FY2015 predictions are as of 9 February 2015. The following figures with “\*” mark might be adjusted downwards at the time of settlement by reflecting multi-years projects.)

Overall revenue in FY2014 is to be about JPY3.2 billion\*, and the expected expenditure will be less than the revenue. It is now projected that IGES will maintain a healthy financial balance in FY2014, with a surplus of about JPY40 million\*, in the last two consecutive years from FY2013.



**Figure 4: Trends in income (FY2007–2014 (projected))**

On the revenue side, basic funding from the Ministry of the Environment of Japan remains at the level of around JPY500 million, while financial support from local governments continues to be on the decline. Overall, the core fund level is gradually decreasing over the years. This necessitated intensified efforts to gain more external funds from various sources. As a result, the amount of external funds for the first two years of the Sixth Phase has reached a record high in both years. In FY2014, IGES is expected to gain about JPY2.3 billion\* in external funds, which is about JPY500 million\* more than in FY2013.

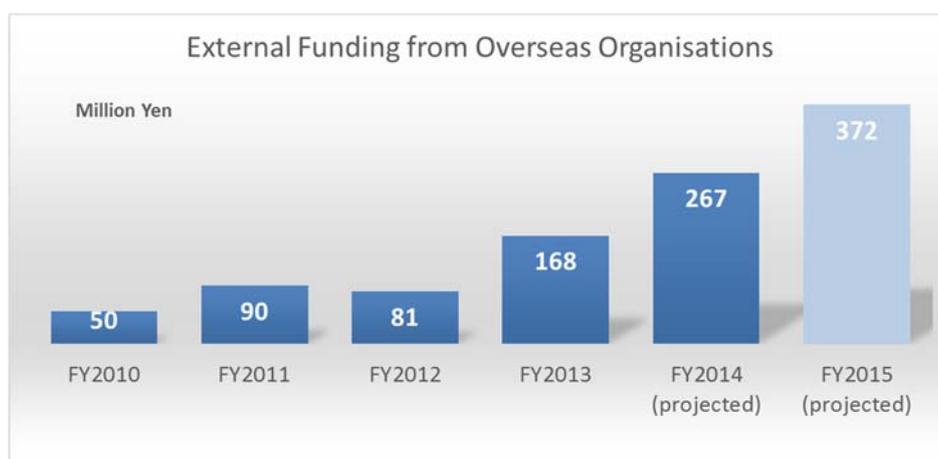
### (1) Trends in external funding

As a main trend in the increase in external funding, special attention must be given to the large increase in funding from MOEJ for city-to-city collaboration, including expanding the support for formulation of the Joint Crediting Mechanism (JCM) large-scale project to realise low-carbon and resilient cities in Asia, and a new project to promote air pollution co-benefits in Asia. Funding with MOEJ as the source increased for such projects from JPY222 million in FY2013 to about JPY592 million. In addition, IGES newly acquired some large-scale projects in several areas that are important for IGES future project development, such as a research project on Sustainable Development Goals (SDGs), a project on the 10 Years Framework Programme on SCP (sustainable consumption and production), as well as contracts on the Climate Technology Centre and Network (CTCN) and Environmental Impact Assessment (EIA).

Looking at funding sources, MOEJ funds still occupy a large part of external funds with about 70 to 80% of projects. This trend has further intensified in FY2014. While this is a very encouraging development, too much dependence on one organisation may not be desirable. Diversification of funding sources must be sought.

One increasing trend that is conspicuous in the Sixth Phase is funding from overseas, and it is expected that compared to FY2012 (the final year of the Fifth Phase), FY2014 will see more than a threefold increase with funding amounting to about JPY270 million\*. Some of the main funding donors are ASEAN Secretariat, US Agency for International Development (USAID), UN

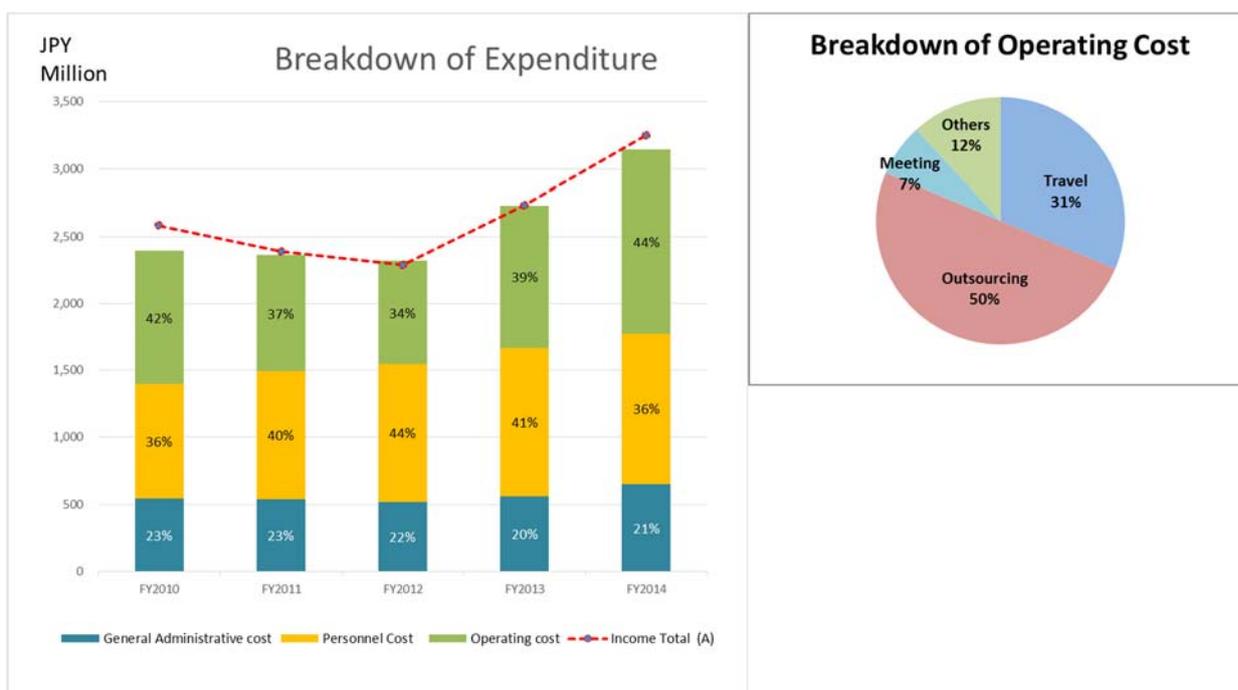
Environment Programme (UNEP), Asian Development Bank (ADB) and the Climate and Clean Air Coalition to Reduce Short-lived climate pollutants (CCAC).



**Figure5: External funding from international organisations (2010–2015 (projected))**

## (2) Expenditure trend

The composition of the overall expenditure has been roughly constant over the years; i.e. about 40% for operating costs, about 40 % for personnel costs, and about remaining 20% for administrative costs. Over 50% of operating expenses are for outsourcing, which includes consignments to those entities concerned for joint project implementation, contracts with experts and consultants to carry out case studies and on-site surveys, and assistance to organise workshops and other meetings.



**Figure6: Breakdown of expenditure (2010–2014 (projected))**

### **(3) Financial management**

In FY2014, a prototype “Strategic Operation Fund” has been set up within IGES, by combining the existing strategic research fund, and certain expense items, which are considered as investment for the future. This fund now supports not only new and innovative research projects of the institute, but some programmes and operations considered essential for future IGES development. Activities supported in FY2014 include the development of the Japanese version of the 2050 Pathways Calculator (2050 Low-Carbon Navigator), ISAP, a proportion of the costs for relocation and expansion of the IGES Tokyo office, considering co-location with ICLEI Japan, and the initial costs for setting up an India desk at TERI.

### **(4) Future challenges**

In the second half of the Sixth Phase, IGES will maintain at its current financial level. Since the core fund is likely to decrease, a corresponding increase in external funds need to be secured. In doing so, diversification of funding sources is considered critical. Funding from the Special Budget for Energy of Japanese Government is important, while funding from organisations other than the Ministry of the Environment, Japan is more actively sought. In addition, efforts to obtain funds from international and regional sources have to be redoubled.

The Finance Committee which was set up in October 2014 should continue regular monitoring of the financial situations of the institute, coupled by timely guidelines and actions to keep the balance sound. Specific measures should be taken to reduce unnecessary outsourcing and other operating costs. The financial management system should be more simplified and nimble, fully utilising IT, not only within the Headquarters, but at satellite offices. Financial management operations at the Area level have to be improved by fully activating the task management system, partially backed by increasing deployment of Programme Officers.

More detailed and specific measures to be taken are presented in the section on the Secretariat below.

## **2-6 Human Resources Management**

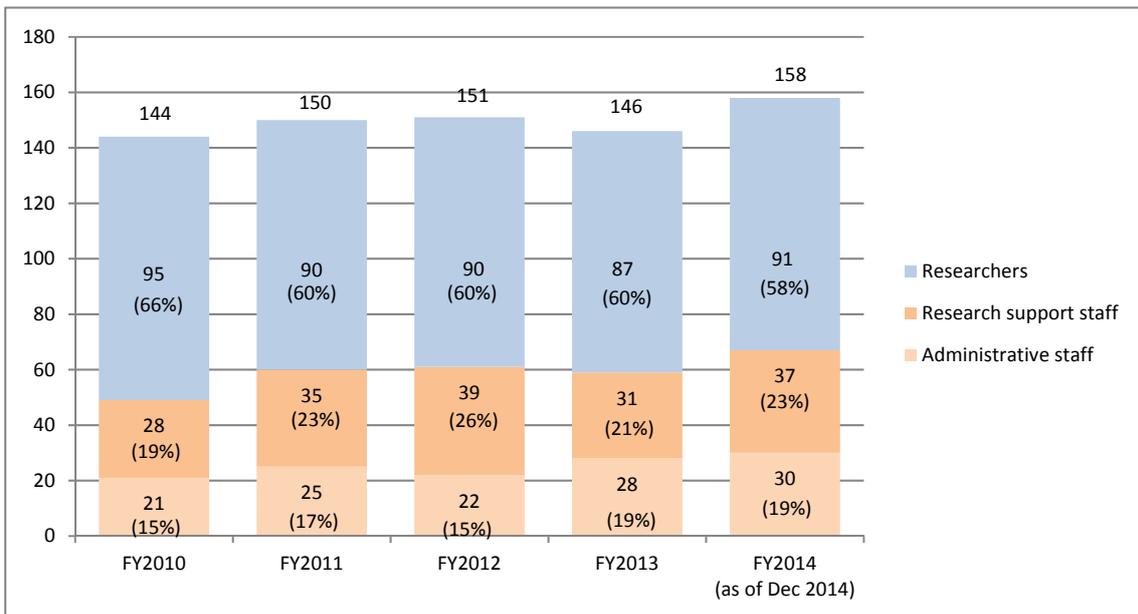
### **(1) Trend of the number of staff members**

The total number of staff members was mainly stable over the four years until FY2013, fluctuating in the range of 172 plus/minus 3. Then, a slight increase is recorded in FY2014, for both researchers and non-researchers. The IGES policy on personnel has been no increase in the number of staff members for the last several years, and the same policy was maintained in the first two years of the Sixth Phase. However a substantial increase in external funds for certain activities has made it necessary to hire new staff members to deal with increasing workloads. Ideally, this could be dealt with by shifting some of the personnel from areas receiving fewer funds to those with more funds, but this is not always possible, given expertise needed for a new project is substantially different from those for past projects.

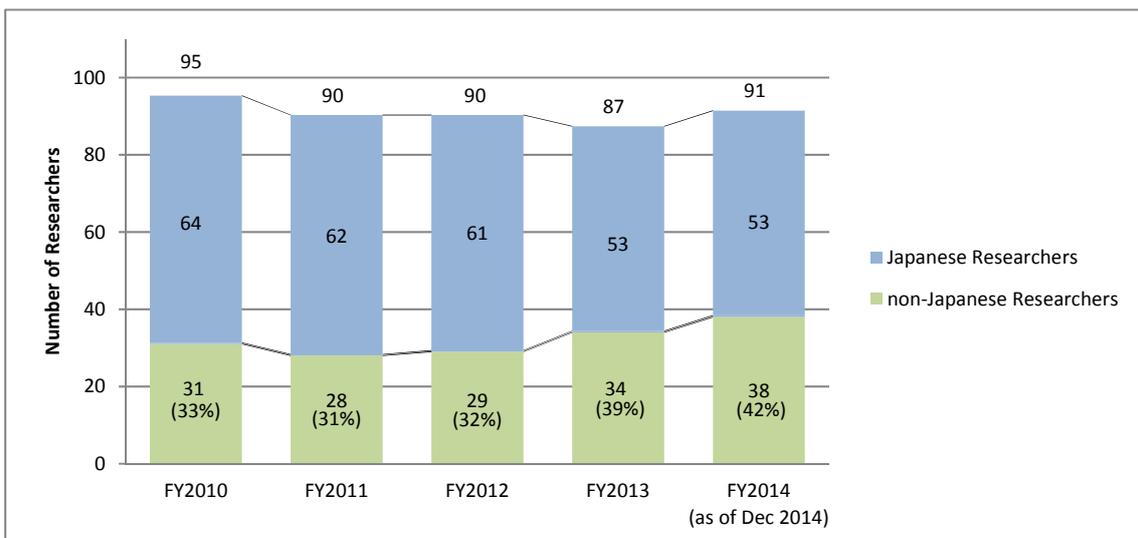
The balance between research staff and non-research staff has been almost constant for the last four years, i.e. 57 to 58%. The percentage of non-research staff members could be seen to be high in comparison with similar policy research institutes. But it is important to recognise that about a half

of non-research staff members are for research support. They have been working closely with researchers to carry out externally supported projects, against which a considerable amount of their time is charged.

Nevertheless, the overall IGES management should be made more efficient, to keep the number of non-research staff members under control. In its early years, IGES introduced a management style modeled on Japanese public organisations. As globalisation proceeds, and in particular funds from international organisations increase, a management style with international standards has become truly essential. The current system seems to be a delicate and complicated combination of the two systems. There is, therefore, a need to make the IGES management system truly international by making use of advanced information technologies.



**Figure 7: Number of IGES Staff (FY2010-FY2014): Researchers and Non-researchers**



**Figure 8: Number of IGES Staff (FY2010-FY2014): Japanese Researchers and Non-Japanese researchers**

The percentage of non-Japanese researchers is on a gradual increase over the last two years. This is, in principle, positive, given the nature of the Institute as defined as an international institute by its Charter. If Japanese and non-Japanese researchers mingle well and synergies are produced between them, that will be an important contributor to IGES strengths. But if they are in fact working separately, this will become a weakness for the Institute. One worrying trend is the relative concentration of non-Japanese researchers in certain areas, while an encouraging trend is more opportunities generated through the 60:20:20 system, in which Japanese and non-Japanese researchers work together.

## **(2) Future challenges**

Despite the continued increase in workloads associated with expanding external funds, the total number of personnel should be maintained at more or less the current level. Thus, challenges are getting more serious as years go on. The basic question is how to cope with increasing workloads with the same number of personnel, i.e. in short, how to raise productivity. Some of the important points have already been raised in the section discussing “Outputs” above. A few additional points are to be made here. First is the potential response to a tendency to hire new staff members, particularly when a substantial new external fund is obtained. For this, a more explicit internal staff transfer system could be introduced so that transfer of staff members concerned could be made in a timely and effective manner. Second is the need to have the current 60:20:20 system implemented in a more flexible manner. Then, more than 20% of a researcher’s time could be spent on a project in another Area. Third, a sound balance between researchers and non-researchers should be examined further. IT-based advanced management systems should be extensively introduced so that complicated internal paper work can be substantially simplified. In parallel, the number of non-chargeable staff members should be brought in-check over the years to control the overhead costs. Lastly, care should be given to the need to generate projects and other opportunities, in which both Japanese and non-Japanese staff members could work together as a team.

## **2-7 Conclusions**

Several Institute-wide issues were discussed above under several headings, i.e. international recognition, impacts, outputs, financial management and human resources management. The table below summarises all the progress made during the first two years of the Sixth Phase. Overall, international recognition or visibility has significantly improved over the last two years. Specific impacts have considerably increased in number by means of a variety of approaches. Outputs have slightly decreased compared to that recorded in the last year of the previous Phase. But it should be understood this has been achieved under growing pressure to cope with requests associated with externally funded projects. Financial balance has been recovered from the critical situation recorded in FY2012. The first two years of the Sixth Phase have seen a sound balance between revenue and expenditure. This is mainly due to improved financial management, coupled with intensive efforts made by all divisions to raise external funds, and reduce spending, where possible. It is noteworthy to highlight the fact that the levels of external funds in the last two years were at a record high. Regarding the overall governance as represented here by human resource management, progress is considered slow, although some improvements were made. IT based management systems have been introduced but have not yet been fully digested by the Institute. This means that some innovative mechanisms backed by intensive awareness raising within the Institute may be necessary.

**Table3: Summary Table: Overall Performance Trends in the First Half of the Sixth Phase**

	FY 2009-FY2012 (Fifth Phase)	FY2013-FY2014 (Sixth Phase)	Remarks
International recognition			Encouraging recognition by the two international ranking schemes.
Impacts			Specific impact cases clearly increased in the last two years.
Outputs			Levels of outputs recorded a slight decrease in the last 2 years.
Finance			The negative balance in FY2012 has been effectively addressed.
Overall balance			
External funds			Highest levels of external funds in FY2013 and FY2014
Governance			Improvements in financial management, etc.

Thus, there are clearly two important issues to focus on in the next two years of the Sixth Phase. One is to raise productivity, and the other is to improve governance systems. But it should be understood that efforts to make IGES more visible, more result oriented, and more sound financially also need to be sustained.

The existing management systems such as the Milestone Management have to be made more effective and clear, and an evaluation system needs to be modified in a consistent manner. Practical capacity building mechanisms should also be introduced particularly for young researchers at the Institute. More detailed discussions on this matter are presented below in the quality management section of PMO below.

To improve governance, the Secretariat has a major responsibility. It is certain that some effective measures have been taken in the last two years in particular, but overall efficiency of governance has not improved substantially. Though it is understood that demands from funding agencies for financial and other management have become even stricter, truly effective IT-based systems need to be introduced and practiced. Together with this, the capacity of Task Managers and Programme Officers has to be enhanced through proper training and manual development. Indeed, innovative measures should be introduced in the coming two years so that IGES in its next Phase can be a full-fledged international institute accompanied by a set of management systems which are up to international standards.

### **3. Review of the Area/Task Activities**

#### **3-1. Climate and Energy Area (CE)**

##### **Original Area Goals described in the ISRP6**

*In the Climate and Energy research area, strategic research activities will be unfolded toward the realisation of low-carbon development in the Asian region with its striking economic growth, in the linkage with the international climate regime. Extra effort will be made to transmit and disseminate research outcomes aiming at the realisation of low-carbon growth, both globally and in the region. This will be achieved through active participation in regional knowledge platforms for sharing of knowledge and information on low-carbon growth strategies developed in each country to date, and through collaboration, cooperation and dialogue with policy-makers, as well as domestic officials in Asian countries and international and donor organisations. Already climate change is a common issue for all research areas within IGES, and we should at all times seek to conduct research that transcends internal research areas.*

*Keeping in perspective international consensus on the global climate change framework that is to be agreed by 2015 and which will commence from 2020, as well as the working rules and guidelines for a strengthened post-2012 framework, analysis and assessment will be carried out on the appropriate form of an international framework and the developing country support to underlay it. Recommendations will be released on institutional design conducive to sustainable growth. ... Under the framework of research on low-carbon societies, expansion of full-fledged research that transcends sectors is required on measures for energy conservation in housing and construction and SMEs, promotion of renewable energies and “smart-community”, and the shift to low-carbon alternatives in various spheres, such as in cities, transportation and waste. Further, one of IGES’ strengths in the climate change sphere is market mechanisms. This database should be strengthened and substantiated, as well as international policy recommendations based on this asset should be made more substantial.*

*In the advancement of this research, analytical methods, such as utilisation of economic models, should be further improved. Taking advantage of IGES’ strength, research should be expanded on focused issues related to economic instruments, including command and controls and market mechanisms, and promotional means such as MRV, NAMA (Nationally Appropriate Mitigation Actions) and registries.*

##### **Intended impacts/outcomes by the Area**

- *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.*

## Task Names and Financial Trends

Unit: thousand

No	Task	FY2013	FY2014
1	Future Climate Regime	40,500	108,017
2	Model Analysis on Energy and Climate Change Policy Options	11,930	13,486
3	Capacity Building for MRV and JCM	221,686	199,800
4	Climate Finance	12,100	11,690
5	Market Mechanisms	84,442	102,242 (SRF* 2,500)
6	Asia Low Carbon Strategy Project	50,084	42,719
	External fund	420,742	475,454
	IGES fund	0	2,500
	Grand-total	420,742	477,954

\* SRF: IGES Strategic Research Fund

## Major impacts/outcomes and/or significant building blocks in FY2013 and FY2014

### CE\_1 Future Climate Regime (Pre and Post 2020)

#### Contribution to the global discourse on future climate regime

- (FY2013) Towards the international framework towards 2020, IGES research proposals and activities promoted understanding on technology transfer and climate finance, as well as encouraged discussions on ambitious nationally determined contributions (NDCs).
- (FY2014) IGES proposal for establishing a researcher consortium for ex-ante review of intended nationally determined contributions (INDCs) was listed by the Nordic Council as one of key readings, and a similar idea was incorporated in the ADP Co-chairs' final draft decision text for COP20.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Peer-reviewed Articles: A Process for Making Nationally-determined Mitigation Contributions More Ambitious. In *Carbon and Climate Law Review* (2013)
- Issue Brief: A Process for Making Nationally-determined Commitments More Ambitious (IGES Issue Briefs on Future Climate Regime) (2013)
- Policy Report: What is the likely outcome of the Durban Platform process? Results of an online questionnaire survey (2013)
- Policy Report: GHG Mitigation in Japan: An Overview of the Current Policy Landscape (2014)

#### Climate Technology Centre Network (CTCN) and Technology Transfer

- (FY2014) Launch of the new programme entitled, "Promoting Low Carbon Technology and Support for developing country through Climate Technology Center and Network (CTCN) to provide technical assistance for them to accelerate the transfer of climate technologies by utilising the operational arm of the UNCCC technology. The project aims to strengthen CTCN operation in Asia and accelerate the diffusion of low carbon technologies in 8 Asia's emerging countries; India, Indonesia, Vietnam, Thailand, Myanmar, Malaysia, Bangladesh, and Sri Lanka.

## **CE\_2 Model Analysis on Energy and Climate Change Policy Options**

### Model analysis on Japanese iron and steel industry

- The results of the Suishinhi research on Japanese iron and steel industry were presented in various occasions, including the MOE/NIES/Mizuho working group on the post-2020 mitigation target formulation and the annual meeting of the Society of Environmental Economics and Policy Studies (SEEPS).

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Peer-reviewed Article: Techno-economic assessment of CO2 emissions reductions in the Japanese iron and steel industry in 2030
- Non peer-reviewed Articles: 2020 年以降における国内鉄鋼部門からの CO2 排出削減：可能性と課題
- Conference Paper: 2030 年における国内鉄鋼部門の CO2 排出削減ポテンシャル評価～電炉に頼らない排出削減の可能性～(2014)
- Conference Paper: 2°C 目標達成へ向けた日本の温暖化対策の方向性～カーボン・バジェットと資源循環の観点から～(2014)

## **CE\_3 Capacity Building for Monitoring, Reporting and Verification (MRV) and Joint Crediting Mechanism (JCM)**

### JCM operation manuals in multiple languages

- (FY2014) The Joint Crediting Mechanism (JCM) operation manual in Vietnam (a text book in CHARTS style) and a training manual for validation and verification applicable to all the signatory countries was developed by IGES and will be utilised for the operation of the JCM. Manual are requested to be prepared in multiple languages by the governments of some JCM participating countries.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Policy publication -Book/ Book chapter: JCM in CHARTS for Vietnam Ver. 1 (2015)

### Launch of Voluntary Emission Reduction Program (T-VER) in Thailand

- (FY2013) The Government of Thailand officially launched the “Voluntary Emission Reduction Program (T - VER)”, for which IGES gave its support to government officials by way of a capacity building programme.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Data/tools: Launch of T-VER website (<http://tver.tgo.or.th/thai/index.php>) (2013)

## **CE\_4 Climate Finance**

### Contribution to global climate finance discussions

- (FY2013) Citation by Intergovernmental Panel on Climate Change Working Group III 5th Assessment Report (IPCC WGIII AR5) on ODI-WRI-IGES Report on Fast Start Finance (2013), the joint publication by the Overseas Development Institute (ODI) and World Resources Institute (WRI) and IGES.
- (FY2014) ODI-WRI-IGES Report on Fast Start Finance (2013) was referred several times at negotiation sessions under the UNFCCC in 2015.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Policy Report: Mobilising International Climate Finance: Lessons from the Fast-Start Finance Period (2013)
- Data/tools: Fast-Start Finance Project and Programme Data Set (2013)
- Discussion Paper: Finance for the International Transfer of Climate Change Mitigation Technologies (2014)

## **CE\_5 Market Mechanism**

### CDM methodology for standardised baseline

- (FY2013) Joint proposal by IGES and the Ministry of Environment, Cambodia was formally adopted by the Clean Development Mechanism (CDM) Executive Board as an international rule on the CDM methodology for standardised baseline.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Data/tools: CDM proposed standardised baseline form (Version 01.0) (2013)

### UNFCCC Regional Collaboration Center

- (FY2013) Between IGES and the United Nations Framework Convention on Climate Change (UNFCCC) secretariat, preparatory discussion initiated on a regional collaboration centre to be located in Bangkok to provide relevant stakeholders with capacity building support for the CDM and market mechanism.
- (FY2014) Scope and activity of the regional collaboration center for the UNFCCC (UNFCCC RCC) has been discussed since June 2014. The regional joint workshop by IGES-ADB-UNFCCC on the Market Mechanism in Asia was successfully organised in Bangkok emphasising the importance of capacity building in the region.
- (FY2014) The regional joint workshop by IGES-ADB-UNFCCC on the Market Mechanism in Asia was successfully organised in Bangkok emphasising the importance of capacity building in the region.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Proceedings: Asia and Pacific Regional Workshop: Promoting CDM and Market Mechanisms (2014)

## **CE\_6 Asia Low Carbon Strategy Project**

### City-to-city collaboration and knowledge sharing for low carbon and resilient city development

- (FY2014) Development of a formal relationship with the City of Yokohama in the area of low carbon and resilient city by signing of the MOU. Y-PORT Center will be established where IGES will be the part of platform along with the City of Yokohama, city network and private sectors in order to address emerging issue of urban climate change resilience in Asian cities while promoting city-to-city collaboration, knowledge sharing, and the implementation of pilot projects for smart and future cities.

### Asia Leadership Programs (ALP) on Sustainable Development and Climate Change

- (FY2014) Initiation of the Asia Leadership Programs (ALP), which aims to empower leaders and policy makers through transformative thinking that drives positive change in their respective countries. Participants include Minister- or vice minister-level from Bhutan, Indonesia, Lao PDR, Maldives, Nepal, Papua New Guinea and Vietnam and Senior-level around the Asia and the Pacific. MOEJ and IGES supports to convene this program in Tokyo in cooperation with the Asian Development Bank (ADB), and the city of Yokohama and the city of Kitakyushu, Japanese companies, such as Toshiba, NEC and other major Japanese companies.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Database: JCM City Database (2014)
- Database: Japan 2050 Low Carbon Navigator (2014)
- Database: One Hundred Questions & Answers about MRV in Developing Countries (2014)
- Policy Report: Low-carbon business guide: India 低炭素ビジネスガイド：インド (2013)
- Commissioned Report: Fact Sheet on International Environmental Cooperation for Local Government 地方自治体による国際環境協力ファクトシート(2013)

## ***Findings and subsequent actions in the 2nd half of the Sixth Phase***

### **Overall findings**

In the 1st half of the Sixth Phase, the Climate and Energy (CE) Area made some interesting inputs to the global discourse on the future climate regime with the aim of provoking discussions among relevant stakeholders as well as to encourage ambitious targets set by all UNFCCC Parties. An IGES Flagship Project was organised in early FY2014 aiming at strategic outreach of IGES findings into relevant global discourse towards COP21, which provided momentum for an institute-wide and coherent approach to this important challenge. A series of publications published under the Flagship Project will be collated and elaborated, then published as a synthesis report in July 2015. Issues to be covered include core elements of a post-2020 climate regime, key challenges for its implementation, and key challenges for enhancing pre-2020 mitigation actions. Elements and challenges also include the core set of means of implementation, i.e. technology, finance and capacity necessary for meeting agreed targets.

CE also continued important activities in Asia-Pacific region to set the basis for enhanced mitigation action, in particular through capacity building activities on CDM, JCM and MRV, as well as through provision of relevant database, tools and methodologies. These efforts led IGES to claim some interesting impacts/outcomes such as:

- CDM Executive Board adopted a methodology for standardised baseline proposed by IGES
- Thailand launched Voluntary Emission Reduction Program (T-VER)

Subsequent business opportunities created include:

- UNFCCC Regional Collaboration Center to be established in Bangkok
- Y-PORT Center to be established for promoting city-to-city collaboration, knowledge sharing, and the implementation of pilot projects for smart and future cities
- Asia Leadership Programs (ALP) on Sustainable Development and Climate Change

Efforts of CE joined by researchers from other areas on climate policies in Japan also brought a challenging but important opportunity to play key roles in strategic research on:

- Introduction of Enhanced Carbon Tax in Japan.

A cross-area taskforce has been organised for initial discussion with the Ministry of the Environment of Japan, and partner research institutions were begun to explore this opportunity.

Last but not least, a significant number of CE and non-CE staff members has been working closely with the Ministry of the Environment of Japan on UNFCCC negotiation processes, for which constant inputs and support has been provided. The areas of intergovernmental negotiation IGES has been supporting include the post-2020 climate regime on mitigation and adaptation, technology, finance, market mechanisms including CDM, JCM and REDD+.

### **Financial trends**

CE acquires the largest external funding amongst all IGES research areas and its financial status is relatively steady. The volume started with JPY420 million in FY2013, followed by JPY478 million in FY2014. The majority of the funding comes from the Ministry of the Environment of Japan, either directly or through other research institutes such as NIES, though funding from non-Japanese sources is gradually increasing. In FY2015 and FY2016, multi-year funding from ADB is secured, which means that about 7% of funding for FY2015 is received from non-Japanese sources including ASEAN, UNFCCC and WRI.

### **Actions to be taken in the 2<sup>nd</sup> half**

An international consensus on the post-2020 climate regime is expected to be reached in late 2015, and the intended nationally determined contributions (INDCs) will be pledged by the Parties in due course, so the needs and interests of stakeholders will shift from the regime setting itself to the detailed rules and effective policies for implementation of mitigation and adaptation actions. A core set of means of implementation, namely technology, finance and capacity building will be an important issue to be addressed by the Area.

Building upon the core competences of CE area, as well as addressing the changing needs of the stakeholders, it is important to set clear focuses for the 2nd half of the Sixth Phase. The current 6 Tasks under CE area can be rearranged into the focuses set out below. Additionally, a Task on Technology will be developed under KRC.

#### **Task 1: Climate and Energy Policy Analysis**

This task aims to provide climate and energy policy analysis at the national and global levels with a view to contributing to policy discussion both pre- and post-COP21 (the 21st Session of the Conference of the Parties). Immediate focus in FY2015 may include: Flagship project (synthesis study) on the future international climate regime; Comparative assessment of Japan's GHG mitigation pathways toward 2030; Review of energy-supply-side policies and measures in selected countries; and Analysis of ex-ante clarity, transparency and comparability of INDC.

#### **Task 2: Climate Finance and Market Mechanism**

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 make

contributions to coordination and cooperation among the different climate finance regimes such as the Green Climate Fund (GCF). The Task also covers market-based mechanisms, such as Emission Trading and Crediting Mechanism.

**Task 3: Capacity Building for Monitoring, Reporting and Verification (MRV) and the Joint Crediting Mechanism (JCM)**

This Task focuses on the capacity building on Inventory and MRV on GHG emissions among the developing countries in Asia, linked with JCM related activities. IGES intends to develop its core competences in this area through provision of tools and services needed by the countries in the region.

**Task 4: Low Carbon and Resilient City Strategy in Asia**

This task provides substantial support for the “Asia Low Carbon Development Strategy Project” launched by MOEJ. By focusing on environmental policy and technologies, the project aims to effectively promote low-carbon development at the city level through international collaboration involving diverse stakeholders, including municipalities, central government, the private sector and research organisations. The task is being implemented jointly by CE and other Areas within IGES.

Last but not least, it is important to promote further cross-area collaboration between IGES Areas with strong urban focuses, such as KUC, IPSS, CE, BJK and SCP. The Adaptation team in NRE also has a research component on multi-municipalities collaboration for climate resilient development planning. A cross-area collaboration mechanism will be developed, likely to be led by PMO and facilitate communication, joint projects and other activities in due course.

## 3-2. Sustainable Consumption and Production Area (SCP)

### Original Area Goals described in the ISRP6

*In the Sustainable Consumption and Production research area, strategic research activities will be carried out toward sustainable consumption and production in Asian countries, and further to realise the corresponding changes in business practices and lifestyles of the people. In the Sixth Phase, research will be advanced utilising knowledge and channels accumulated to date. Emphasis will be placed on appropriate waste treatment in cities, including composting, formation of effective recycling systems with a view of Asia as a whole, policy analysis from the perspective of sustainable production and consumption centred on improvement of resource productivity, and policy recommendations focused on lifestyle changes. Furthermore, based on the groundwork of knowledge related to material flow, resource productivity, waste management and 3R policies cultivated by IGES to date, integrated research on sustainable consumption and production, including natural resources, water, food, and energy, will be initiated. Meanwhile, key policies and initiatives in the context of Asia will be analysed and assessed, and results communicated to relevant policy processes.*

### Intended Impacts/Outcomes by the Area

- *Regional/global discussions are provoked on urgent actions for resource saving and sustainable consumption*
- *A “REDUCTION” concept is mainstreamed taking into account the context of both emerging and maturing economies*
- *3R policy formulation and its implementation is promoted both at regional and national level*
- *Higher attention is received on policy nexus of climate and 3Rs and linkage between international initiatives on low carbon and resource saving society*
- *Multi-stakeholder dialogue and collaboration (especially between community and experts) is promoted for decontamination and rehabilitation process in Fukushima (Completed in FY 2014)*

### Task Names and Financial Trends

		Unit: Thousand	
No	Task	FY2013	FY2014
1	Policies and Institutions for Transitioning to SCP	0	0
2	Realisation of Sustainable Living and Consumption in Asia	47,232 (SRF* 972)	60,088
3	Resource Circulation and Integrated Waste Management in Asia	48,817	65,636
4	Fukushima Action Research on Effective Decontamination Operation (FAIRDO)	42,575	0
5	Participation in Policy Processes in relation to SCP	9,300	6,965
	External fund	146,952	132,032
	SRF	972	
	Grand-total	147,924	132,032

\* SRF: IGES Strategic Research Fund

## **Major impacts/outcomes and/or significant building blocks in FY2013 and FY2014**

### **SCP\_1 Policies and Institutions for Transitioning to SCP**

#### *Taking a lead in SCP 10YFP*

- (FY2013) IGES president was requested to participate in the SCP 10YFP as a board member and representative of the Japanese government.
- (FY2014) Programme of sustainable lifestyle and education (SLE) component of SCP 10YFP was provided inputs from IGES. SLE Programme of SCP 10YFP was launched in November 2014 and SCP Area provides multi-stakeholder advisory committee member to SLE of SCP 10YFP.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Discussion paper: Addressing Climate Change Through Actions Targeting Lifestyles (For background document of SLE component launch of 10YFP)
- Peer-reviewed Article: Making Sustainable Consumption and Production the Core of Sustainable Development Goals (2013)
- Peer-reviewed Articles: Sustainable production, consumption, and livelihoods: global and regional research perspectives (in Journal of Cleaner Production) (2013)
- Discussion Paper: Making Sustainable Consumption and Production the Core of the Sustainable Development Goals (2013)
- Conference Paper: Sustainable Consumption in Asia - Resource Pack (2013)

### **SCP\_2 Realisation of Sustainable Living and Consumption in Asia (Sustainable Lifestyles)**

#### *Promotion of a "REDUCTIONS" concept*

- (FY2013) Reducing Environmental Degradation & Unsustainable Consumption Trends & Impacts On Nature & Society (REDUCTIONS) project was recognised as the one of the major themes of World Resource Forum sessions.
- (FY2014) Special Sessions on REDUCTIONS project was organised at World Resource Forum in October 2014. 5-8 factsheets on REDUCTIONS project was presented at World Resource Forum and reflected to the messages from the forum.
- (FY2013) Training of policy makers was conducted under the ASEAN+3 SCP Leadership programme and SWITCH-Asia.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Issue Brief series: Absolute REDUCTIONS: Factsheets 2014
- Peer-reviewed Articles: Consumer scapegoatism and limits to green consumerism (In Journal of Cleaner Production) (2013)
- Discussion Paper: Best Practices and Recommendations for Waste Reduction: Towards Sustainable Consumption (2013)

### **SCP\_3 Resource Circulation and Integrated Waste Management in Asia**

#### *3R policy promotion through the Regional 3R Forum*

- (FY2013) At the 5th Regional 3R Forum in Asia and the Pacific, a proposal mainly coordinated by IGES on a core set of indicators on the 3Rs was recognised as an initiative and proposal by the Forum secretariat, and contributed to the formulation of a basis for 3R implementation in the region.

- (FY2014) The Asia Pacific 3R White Paper project proposed by IGES and partners was launched and its 1st drafting committee was held in Cebu in January 2015 participated by 3R policies and waste management experts in the region. The 2nd drafting committee will be held in February 2015.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Discussion Paper: Suggested Core Set of 3R Policy Indicators (5th Regional 3R Forum in AP) (2013)
- Discussion Paper: 3R Policy Indicator Factsheets Ver. 1 (2013)
- Peer-reviewed Articles: Waste Reduction and Recycling Initiatives in Japanese cities, Lessons from Yokohama and Kamakura (In Waste Management and Research) (2013)
- Policy Report: Policy for Fostering "Sound" Recycling Industries (2013)

#### EPR policy promotion through OECD processes

- (FY2013) EPR case study on home appliance recycling law was submitted as a part of Japan's contribution to the Organisation for Economic Co-operation and Development Environment Policy Committee (OECD EPOC).
- (FY2014) IGES expert chaired a session on emerging issues related to EPR at OECD Global Forum in June 2014. EPR case study on home appliance recycling law was also presented at the Forum.
- (FY2014) Responding to a request from OECD, IGES contributed to the updating of OECD EPR Guideline for Working Party on Resource Productivity and Waste.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Discussion Paper: EPR-based Electronic Home Appliance Recycling System under Home Appliance Recycling Act of Japan (Case study prepared for the OECD) (2013)
- Peer-reviewed Articles: Linking Informal and Formal Electronics Recycling via an Interface Organization (In Challenges) (2013)
- Peer-reviewed Articles: Assessing the Climate Co-benefits from Waste Electrical and Electronic Equipment (WEEE) Recycling in Japan (in Journal of Cleaner Production) (2013)

#### Policy nexus on climate and 3Rs

- (FY2013) IGES proposal for quick city assessment was agreed on under the CCAC's waste initiative. IGES secured a role of development of Short-Lived Climate Pollutants (SLCP) emissions calculation tool under CCAC Municipal Solid Waste Initiative (MSWI).
- (FY2014) Finalised quick assessment and action plan development for 4 cities in Asia for SLCP reduction from waste sector (under CCAC MSWI)

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Issue Brief: Co-benefits of the 3Rs (reduce, reuse and recycle) of municipal solid waste on climate change mitigation (2013)
- Data/tools: GHG calculator for solid waste: Estimation Tool and User Manual (2013) (In English, Thai and Khmer)
- Peer-reviewed Articles: Climate Co-benefits of Energy Recovery from Landfill Gas in Developing Asian Cities: A Case Study in Bangkok (2013)
- Peer-reviewed Articles: Integrated Solid Waste Management: An Approach for Enhancing Climate Co-benefits through Resource Recovery (In Waste Management & Research) (2013)

#### **SCP\_4 Fukushima Action Research on Effective Decontamination Operation (FAIRDO) – completed in FY2014**

##### Multi-stakeholder collaboration for Fukushima

- (FY2013) International communities on nuclear incident preparedness, in particular the members of NERIS, acknowledged the lessons learned from FAIRDO project, an action research focused on the emergency response, reconstruction and decontamination after Fukushima Daiichi Nuclear Power Plant Accident.
- (FY2013) Communication between experts and local communities improved to some extent through FAIRDO project implementation.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Discussion Paper: Challenges of Decontamination, Community Regeneration and Livelihood Rehabilitation / 「除染」の取り組みから見えてきた課題 安全・安心、暮らしとコミュニティの再生をめざして(2013)
- Non peer-reviewed Articles: 福島における除染の現状とあるべき姿 (月間ビジネスアイエネコ) (2013)

#### **SCP\_5 Participation in Policy Processes in relation to SCP**

##### Institution for environmental technology diffusion

- (FY2014) UNEP and IGES agreed to set up IGES Centre Collaborating with UNEP on Environmental Technologies initially to support CCAC MSWI-related function in December 2014 with signing of SG of UNEP and Chair of the Board of IGES.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Policy Report: Policy for Fostering "Sound" Recycling Industries (2013)
- Book Chapter: 第1章 グリーン経済/グリーン成長とは何かー指標開発の国際的潮流(In グリーン成長の経済学) (2013)
- Book Chapter: 第3章 指標・勘定体系の国際的動向 - 物質フロー指標, 環境・経済統合勘定(In グリーン成長の経済学) (2013)

### **Findings and subsequent actions in the 2nd half of the Sixth Phase**

#### **Overall findings**

In the 1st half of the Sixth Phase, the Sustainable Consumption and Production (SCP) Area made steady progress in many aspects of the original goals speculated in ISRP6. Various operations led by SCP can be categorised in two work streams, namely (i) promotion of sustainable consumption and production policy and its implementation, (ii) promotion of 3Rs policy and its implementation, including support to less developed countries addressing their immediate needs on integrated waste management. SCP team has developed the concept of a phased approach to foster countries in the region, which respectively are at different development stages, to make step-by-step progress in their transition to the wise use of finite resources.

As for the promotion of sustainable consumption and production, continuing support to UNEP and governments in the region including the Ministry of the Environment of Japan has led IGES to play

key roles in global and regional SCP discourse. The most significant achievements in terms of impacts/outcomes and new opportunities developed include:

- Taking a lead in the UN decade programme – SCP 10YFP: assuming board member representing the Government of Japan; and guiding the programme of sustainable lifestyle and education (SLE) component.
- Promoting a “REDUCTIONS” concept among policymakers in the region.

As for the promotion of 3Rs policy and its implementation including integrated waste management, SCP team worked closely with global and regional processes such as UNEP International Resource Panel, CCAC waste initiative, OECD’s WRPW, and Regional 3R Forum in Asia and the Pacific. Highlights of its impacts/outcomes generation include:

- 3R policy promoted through the Regional 3R Forum with IGES substantive inputs, such as provision of a set of 3R policy indicators
- EPR policy promoted through OECD processes with IGES substantive inputs, such as provision of findings and recommendations from Japanese home appliance recycling law studies
- Co-benefit approach on climate and 3Rs nexus promoted at a municipal level in selected cities in Asia with tools and trainings provided by IGES

SCP and PMO worked together to strengthen IGES’s strategic partnership with UNEP. This effort has been materialised as a new and important institutional set up as:

- IGES Centre Collaborating with UNEP on Environmental Technologies with its initial focus on CCAC MSWI-related issues to be launched in 2015.

Last but not least, SCP team successfully completed its mission on Fukushima Action Research on Effective Decontamination Operation (FAIRDO). In response to the urgent needs of ensuring information sharing and stakeholders participation in planning and implementation of decontamination and reconstruction after Fukushima Daiichi Nuclear Power Plant Accident, IGES convened relevant experts at local, national and international levels. Actions taken and recommendations disseminated through the project were unique amongst others, from social and political science point of view, and contributed to the strengthening of stakeholders network, including community members, for still on-going reconstruction effort in Fukushima. Necessary follow-up activities will be carried out on an ad-hoc basis.

### **Financial trends**

The financial situation in the 1st half of the Sixth Phase is stable at the level of JPY150 million with relatively diverse funding from both Japanese and international sources. The volume started with JPY147 million in FY2013, followed by JPY133 million in FY2014. Provisional budget size for FY2015 is around JPY250 million with the new development on IGES Centre Collaborating with UNEP on Environmental Technologies, which accounts additional JPY100 million on top of SCP’s steady annual operation budget level.

The majority of funding comes directly from the Ministry of the Environment of Japan and this trend is maintained. FY2013 portfolio shows that 34% came from international sources, such as ADB, UNU and UNEP. The portion dropped to 10% in FY2014 and will increase to 15% in FY2015 excluding the funding secured for the new collaborating centre. Once the funding for the

centre secured from UNEP, originating from MOEJ, is included as non-Japanese funding, this will increase the rate to 49%.

A very small portion of the Strategic Fund (JPY1 million) that was invested in FY2013 was effectively used, and partly but significantly contributed to opportunity building in IGES, leading the global discourse in SCP and relevant concepts.

### **Actions to be taken in the 2<sup>nd</sup> half**

The SCP Area is in a good position to maintain and further promote its activities in two work streams, namely (i) SCP policy and its implementation, and (ii) 3R policy and its implementation accommodating the immediate needs of countries in Asia and the Pacific such as the co-benefit approach to integrated waste management. It is suggested that these two focuses should be strengthened by reorganising the current six tasks in the following manner:

#### **Task 1: Promotion of SCP policy and implementation**

This Task with its strong cross-cutting nature will focus on further promotion of SCP policy and implementation. Mobilisation of relevant IGES expertise, not only from the SCP Area but also from other research Areas, is essential. For example, ISRP6 stipulates its scope as '*integrated research on sustainable consumption and production, including natural resources, water, food, and energy*'. Another important challenge of the Task is how strategically and effectively the relevant stakeholders can be reached to '*realise the corresponding changes in business practices and lifestyles of the people*'. The team members including the non-SCP members participating in this Task may need to jointly look into effective approaches and methodologies to address core questions of SCP at global, regional, national and local levels. The task is expected to develop its cross-cutting operation by taking the lead in shaping SCP concepts and provoking relevant discussions, along with immediate pragmatic operations including SCP 10YFP and REDUCTIONS.

#### **Task 2: Promotion of 3R policy and implementation**

This Task will continue its commitment to mainstreaming 3R policy and its implementation. Continuing and new operations include: Promotion of 3R indicators for the member countries of the Regional 3R Forum in Asia and the Pacific; EPR in the context of OECD policy discussions; and climate and waste nexus in the context of CCAC MSWI.

#### **Task 3: IGES Centre Collaborating with UNEP on Environmental Technologies - Co-benefits on the Integrated Waste Management and Climate Change**

This task will be newly established. The Centre, named the "IGES Centre Collaborating with UNEP on Environmental Technologies", will be established as a unit within IGES, located at IGES Headquarters in Hayama, Japan. The Centre will be supported by researchers and administrative staff from IGES, especially in the SCP Area. A major focus of the Centre during its first two years will be to contribute technical expertise to UNEP's Climate and Clean Air Coalition (CCAC) in the field of waste management.



### 3-3. Natural Resources and Ecosystem Services Area (NRE)

#### Original Area goals described in the ISRP6

*In the research area of Natural Resources and Ecosystem Services, strategic research activities will be carried out to maintain and enhance the resilience of the natural resources and ecosystem services that support the livelihoods of people in Asian countries. From a basic common viewpoint on appropriate payment for ecosystem services and community-based participatory governance, integration of the four sectors which made up the natural resource management group in the Fifth strategic research phase, namely forest, biodiversity, water and climate change adaptation, will be actively undertaken. IGES will make every effort to transmit and disseminate its research outcomes through proactive involvement in knowledge platforms for exchange of knowledge and experience related to climate change adaptation, REDD+ and appropriate payment for ecosystem services, and through collaboration with practicing communities. In addition, relevant international frameworks and financial mechanisms will be analysed and assessed, and recommendations on appropriate institutional design will be communicated.*

#### Intended Impacts/Outcomes by the Area

- *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.*

#### Task Names and Financial Trends

		Unit: Thousand	
No	Task	FY2013	FY2014
1	Resilience of Livelihood: Land, Water, Food and Energy	0	10,803
2	REDD+ and other Forest-related Issues	74,058	67,452 (SRF* 4,000)
3	Climate change adaptation	33,231	18,696
4	Water resource management	38,517	63,705
5	Biodiversity and Ecosystem Services	29,723	32,994
6	Knowledge Platform for Climate Change Adaptation and Natural Resource Management	38,996	53,000
External fund		214,525	241,650
SRF		0	4,000
Grand-total		214,525	246,650

\* SRF: IGES Strategic Research Fund

## Major impacts/outcomes and/or significant building blocks in FY2013 and FY2014

### NRE\_1 Resilience of Livelihood: Land, Water, Food and Energy

#### Nexus research on thermal power generation and on water-soil linkages

- (FY2014) Invitation by the World Bank to develop and implement a proposal on energy sector water demand in India.
- (FY2014) Collaboration with UN-FLORES to establish a regional consortium for a nexus observatory in Asia focusing on the water-soil nexus

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Book Chapter: Water use efficiency in thermal power plants in India (World Water Development Report 2014)

#### Research on use of satellites to monitor implementation of environmental agreements

- (FY2013-2014) International research team established to develop methodology to assess impacts of Earth Observation on environmental agreements
  - Conference Paper: A study on methods for assessment of the impact of Earth observations on environmental policy (At 65th International Astronautical Congress) (2014)
  - Conference Paper: Recent trends in the use of remote sensing to address environmental issues (At 57th Autumn Conference of the Remote Sensing Society of Japan) (2014)

### NRE\_2 REDD+ and other Forest-related Issues

#### Providing tools, models and policy advice on REDD+

- (FY2013, FY2014) The REDD+ community-based forest monitoring manual training manual on community-based forest biomass monitoring is being used by training institutions and has been translated into Vietnamese. It has been downloaded about 17,000 times.
- (FY2014) IGES inputs are reflected in a Japanese government submission on REDD+ safeguards.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Research Report: Community based forest biomass monitoring: A manual for training local level facilitators (2013)
- Research Report: Community based forest biomass monitoring: A manual for training local level facilitators (2013)
- Peer-reviewed Articles: REDD+におけるディスプレイメントと地域コミュニティの関与 (In 林業経済) (2013)
- Peer-reviewed Articles: Effects of Pansharping on Vegetation Indices (In ISPRS International Journal of Geo-Information) (2013)
- Conference Paper: Economic and Climate Benefits from Utilization of Unused Farmlands for Eucalyptus Plantations and Charcoal Production in Thailand (At 2014 ISSAAS International Congress on Agricultural Changes in Southeast Asia: Past, Present and Future) (2014)

#### Guidelines on tropical timber trade risk assessment

- (FY2013) The IGES report “Managing forests as a renewable asset for present and future generations: Verifying legal compliance in forestry in Papua New Guinea” was translated into Chinese and used by The Nature Conservancy (TNC) to draft risk assessment guidelines for Chinese buyers of timber from PNG.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Policy Report: Managing forests as a renewable asset for present and future generations: Verifying legal compliance in forestry in Papua New Guinea (2013)

#### **NRE\_3 Climate change adaptation**

- (FY2013) IGES was a contributing author of the Intergovernmental Panel on Climate Change Working Group III 5th Assessment Report (IPCC WGIII AR5), which cited four IGES papers on climate change adaptation.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Policy Report: Preliminary Focus Group Study: Australian Farmer Attitude to On-farm Risk Management and Insurance (2014)
- Research Report: Vulnerability and Capacity Assessment Index (VCAI) for Climate Change Adaptation (2014)
- Research Report: Loss and Damage Associated with Climate Change Impacts and Adaptation: Stakeholder Perceptions for Shaping the Future Agenda of Asia Pacific Adaptation Network (2013)
- Research Report: Adaptation decision making frameworks and tools: Multi-criteria decision making tools for prioritizing adaptation actions at community level (2013)

#### **NRE\_4 Water resource management**

- (FY2013) IGES provided a chapter on water-food-energy nexus for the UNESCO World Water Development Report 2015.
- (FY2014) Inputs were requested and provided to the UNESCO World Water Development Report 2015.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Policy Report: アジア水環境パートナーシップ(WEPA) 第2期報告書/ Water Environment Partnership in Asia (WEPA) Second Phase Final Report (2013)
- Research Report: Water Availability for Sustainable Energy Policy: Assessing cases in South and South East Asia (2013)
- Book Chapter: International Negotiations on Climate Change and Water (In Climate Change and Water Resources, 2014)

#### **NRE\_5 Biodiversity and Ecosystem Services**

- (FY2014) The second year of the Satoyama Development Mechanism (SDM) was successfully launched, and is now supporting 12 Satoyama-relevant projects in 10 countries.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Peer-reviewed Articles: An assessment of the impacts of the REDD+ pilot project on community forests user groups (CFUGs) and their community forests in Nepal (In Journal of Environmental Management) (2013)
- Peer-reviewed Articles: Developing forest sector and REDD+ governance standards through a multi-stage, multi-level, and multi-stakeholder approach (In Poverty in Focus) (2013)
- Research Report: Unveiling Nature's Gifts: Measuring and Visualising Ecosystem Services (2014)
- Book Chapter: The trade in illegal timber: the response of Japan (In Illegal Logging and Related Trade II) (2013)
- Commissioned Report: Toolkit of the indicators for resilience of Socio-ecological Production Landscapes and Seascapes (2014)

#### Providing tools, models and policy advice to Nepal

- (FY2014) Based on request, IGES prepared an MoU with the Nepal Ministry of Forests and Soil Conservation (MoFSC) to give the Ministry full opportunity to make use of the national forest governance standard for Nepal developed by IGES and partners.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Discussion Paper: Quality-of-governance standards for carbon emissions trading. Developing REDD+ governance through a multi-stage, multi-level and multi-stakeholder approach 2013

#### **NRE\_6 Knowledge Platform for Climate Change Adaptation and Natural Resource Management**

- (FY2014) Technical inputs provided by IGES were used by MOEJ in submissions to COP and IPCC.
- (FY2014) The IGES pilot project on integrated approach to mainstream adaptation-mitigation concerns into local development planning encouraged local governments in the Silang-Santa Rosa River basin in the Philippines to begin inter-municipality coordination to include climate issues in local land-use plans.

### ***Findings and subsequent actions in the 2nd half of the Sixth Phase***

#### **Overall findings**

During the 1st half of the Sixth Phase, Natural Resources and Ecosystem Services (NRE) Area focused on four thematic issues, namely forest, climate change adaptation, water, and biodiversity and ecosystem services, as well as an integrative approach to resilience of livelihood addressing nexus between land, water, food and energy. On the thematic issues, highlights in impacts/outcomes generation include:

- Community-based forest management in the region promoted through the wide use of IGES tools and guidelines by the practitioners and training communities, such as the training manual on community-based forest biomass monitoring
- Risk assessment guidelines prepared by The Nature Conservancy (TNC) based on IGES policy report on risks and legal compliance of tropical timber trade
- Sustainable use of socio-ecological production landscapes and seascapes being promoted through pilot projects under the Satoyama Development Mechanism (SDM) of the

International Partnership for the Satoyama Initiative (IPSI).

- Local governments at the Silang-Santa Rosa River basin in the Philippines initiated inter-municipality coordination to enhance local Comprehensive Land-use Plans with climate consideration, working together with IGES pilot project on integrated approach to mainstream adaptation-mitigation concerns into local development planning.

Other than the tangible impacts/outcomes mentioned above, several opportunities were created through continuing efforts made by the NRE members on nexus study and thematic areas. These include:

- Invitation from UNESCO to work on World Water Development Report 2015, in particular a chapter on water-food-energy nexus
- Invitation from the World Bank to carry out energy sector water demand research in India
- MoU between Nepal Ministry of Forests and Soil Conservation (MoFSC) and IGES for making use of the national forest governance standard developed by IGES and its partners
- Collaboration with UN-FLORES to establish a regional consortium for a nexus observatory in Asia focusing on the water-soil nexus
- Participation in research effective design and use of satellites for natural resource conservation

Last but not least, it should be noted that some members of NRE, in particular those engaged in adaptation and REDD+ operations has been working closely with the Ministry of the Environment of Japan on UNFCCC and IPCC processes and providing constant inputs to support their activities. In addition to this, a member of NRE was a contributing author of the IPCC Working Group III 5th Assessment Report (IPCC WGIII AR5) and four IGES papers on climate change adaptation were cited in the report.

### **Financial trends**

NRE has kept the same level of external funding volume in the first half of the Sixth Phase, starting with JPY214 million in FY2013, followed by JPY241 million in FY2014. Provisional budget size for FY2015 is around JPY257 million which includes C-level (unsure) fund projects of JPY18 million after 50% reduction. It can be remarked that the size of each fund is relatively small (funds over JPY10 million make up four out of 22). 14% of funding for FY2014 is received from non-Japanese sources including UNU-IAS, APN and WB.

### **Actions to be taken in the 2<sup>nd</sup> half**

With respect to the on-going efforts made by the NRE team in addressing '*resilience of the natural resources and ecosystem services that support the livelihoods of people in Asian countries*' stipulated in the ISRP6, this direction will be further enhanced with the 'landscape approach' for integrated natural resource management currently discussed in the area exercise on the medium-to-long term strategy.

The 'landscape approach', in short, is explained as an '*approach to analyse how competing demands for food, income, biodiversity and ecosystem services can be balanced through policies and their implementation. In seeking to reconcile development priorities and environmental sustainability, a landscape approach can help in addressing the increasingly complex and widespread environmental, social and political challenges that transcend traditional land and*

*natural resource management boundaries. Strengths of a landscape approach include ensuring processes operating across scales are complementary and preserving multi-functionality, i.e. the multiple uses and needs landscapes serve* (excerpt from MLS discussion paper draft). ' This approach would not conflict with, but rather strengthen the current competence of NRE and basic approaches taken, such as strong emphasis on field- and evidence-based research and the community-based approach.

It is suggested to start piloting the application of this approach in selected NRE activities, and through this, the concept and approach will be further shaped. The approach will be further elaborated and applied to other activities in due course, so that Area-wide coherence on thematic research will be strengthened with the common approach.

Another action to be taken is the strengthening of Institute-wide capacity in addressing the increasing needs on climate change adaptation policy and implementation in the region. Streamlining of the current structure developed over time in the 1<sup>st</sup> half of the Sixth Phase, i.e. two Tasks in NRE and APAN operation based in BRC, would provide a solid foundation for a coherent operation on Institute -wide adaptation related activities.

The aforementioned actions will be consolidated through rearrangement of current Tasks and components under respective tasks in the following manner:

#### **Task 1: Resilience of Livelihood: Land, Water, Food and Energy**

Research under this Task will move to a focus on “Landscapes for Resilience,” highlighting the need to organise natural resource management at spatial scales that optimise outcomes and unite agendas such as nature conservation, food and water security, livelihoods, climate change adaptation and mitigation. The landscape approach will be piloted on, but not limited to, research activities including: Mainstreaming biodiversity conservation and sustainable management in socio-ecological production landscapes and seascapes (SEPLS); climate-sensitive land-use planning in cooperation with local actors in the Philippines.

#### **Task 2: REDD+ and other Forest-related Issues**

This Task continues to 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. The research activities includes: Development of REDD+ guidelines for the JCM; Participatory REDD+ approaches: community participation in forest monitoring and REDD+ project design; Investigation of the bottlenecks in the REDD+ international negotiation.

#### **Task 3: Biodiversity and Ecosystem Services**

This Task will focus on 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.

#### **Task 4: Water Resource Management**

This Task will focus on increasing the efficiency and ensuring the local sustainability of water use by proposing integrated water resource management (IWRM) and governance models for different

socio-economic settings. As an essential part of IWRM, it also addresses wastewater management, which is a major concern for Asian countries.

#### **Task 5: Climate Change Adaptation**

The current two adaptation Tasks will be merged for further coherent operation to address increasing needs on policy and implementation. Linkage with CE and KRC, in particular, on their thematic focuses on technology, finance and capacity building will be strengthened. Collaboration with other in-house activities focusing on low-carbon and resilient urban development can be mutually beneficial. APAN related operations will be managed by NRE-AD team in close collaboration with BRC staff members. Regional and country-specific capacity building programmes are expected to be developed along with the Adaptation Initiative announced by the Government of Japan in September 2014.

### **3-4. Green Economy Area (GE)**

#### **Original Area goals described in the ISRP6**

*In the research area of Green Growth and Green Economy, strategic research will be carried out concerning sustainable growth in Asia, on its way to becoming the factory of the world and a huge consumer market, and the appropriate nature of economies to realise sustainable, low-carbon, resource-efficient and less-resource-use growth. In the process of the Rio +20 held in June of 2012, the complementarity between economy and environment was widely recognised. The investment necessary for such type of development, as well as the resulting creation of green jobs, was strongly affirmed as a required pillar of new growth.*

*For this reason, Green Growth and Green Economy will be designated as an important issue related to sustainable development, and will be operated as one of the core research areas in the Sixth Phase. Growth strategy scenarios for Asian countries will be deliberated. Fundamentally, there needs to be clarity about the vision of a development path for Asia, as an economic growth route within the bounds of natural resource limitations. By studying growth strategy scenarios not just for growth for the sake of growth, but for improvements in the quality of life and well-being, research must be carried out on an evaluation standard to supplement GDP. Environmental costs will be computed and internalised in economies. Moreover, a new strategy is called for—one that has investment in environmental spheres as its mainstay. As such, strategic research will be carried out related to the necessary institutional design and policy measures for the greening of economy and business and the creation of green employment. Furthermore, it is essential to tackle the issues of decoupling and leakage. In the Sixth Phase, research activities related to green economies, previously dealt with individually in each research group within IGES, will be integrated. Research will be carried out on growth strategies in Asian countries, the necessary investment and changes in employment for the shift to a green economy, as well as the policy tools to accelerate this shift. In addition, by promoting links with the main economic drivers including private sector, strategic research in the area aims to propose practical policies that contribute to real impact generation to promote green economy.*

*In collaboration with NIES and JICA, newly developed low-carbon networks in Asia, such as the East Asia Knowledge Platform for Low Carbon Growth and LoCARNet, will be made operational. Likewise, internal research cooperation within IGES will be enhanced.*

#### **Intended Impacts/Outcomes by the Area**

- *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 policy making on sustainable resource use can be provided by the UNEP International Resource Panel.*
- *The Japanese government will make new energy policy to ensure energy security after Fukushima nuclear accident and contribute ambitiously to the post-2015 climate agreement.*
- *Involvement of the business sector in Japan's domestic policy making processes regarding the establishment of low-carbon society will be strengthened and the awareness on business risk and opportunities as a result of global climate change impacts will be raised.*

- 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.
- South Asian countries adopts an integrated approach on resource management and planning under resource constrains and climate change impact
- A framework on ecosystem services accounting can be established in Japan.

## Task Names and Financial Trends

Unit: Thousand

Task	FY2013	FY2014
Transition to Green Growth/Economy	10,319	42,056
Green investment and green jobs	7,869	7,749
Collaboration with stakeholders for promoting green business	18,036 (SRF* 900)	54,430
Green growth and green economy: policy process and policy dialogue	12,625	17,800 (SRF* 3,500)
External fund	47,949	118,534
IGES Fund	900	3,500
Grand-total	48,849	122,034

\* SRF: IGES Strategic Research Fund

## Major impacts/outcomes and/or significant building blocks in FY2013 and FY2014

### GE\_1 Transition to Green Growth/Economy

#### Sustainable resource use and management in Asia (PSEE-Resource)

- Better knowledge supporting policy making on sustainable resource use can be provided by the UNEP International Resource Panel and through the OECD CIRCLE project.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Conference paper: CGE analysis of trade and investment liberalisation in East Asia (At East Asian Association of Environmental and Resource Economics (EAAERE) (2013)
- Conference paper: Accounting for materials and carbon emissions embodied in trade: Analysis of Japan's iron and steel sector using the multi-region input-output model (2013)
- Conference paper: Efficiency and fairness of resource use (2013)
- Peer-reviewed articles: Direct versus embodied emissions: Criteria for determining the carbon coverage for border carbon adjustment (in Carbon Management) (2013)
- 2 MOEJ commissioned reports: PSEE-Resource (2013 & 2014)
- Organise a public symposium on sustainability resource use (2014)
- Activity: participation in UNEP International Resource Panel meetings and the OECD's CIRCLE project as a project partner.

#### Sustainability indicators (PSEE-Indicator)

- Policy makers will recognised the proposed integrated sustainability indicators and use to guide policy making.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Book: The Economics of Green Growth- New Indicators for Sustainable Societies (2014)
- Book chapter: Efficiency and fairness of resource use: from a planetary boundary perspective. (In The Economics of Green Growth- New Indicators for Sustainable Societies) (2014)
- Book chapter: Natural capital and ecosystem accounting. (In The Economics of Green Growth- New Indicators for Sustainable Societies) (2014)
- 2 MOEJ commissioned reports: PSEE-Indicator (2013&2014)
- Organised a public symposium on sustainability and happiness indicators (2014)

#### Water-energy-climate nexus study for the Ganges River basin

- South Asian countries adopts an integrated approach on resource management and planning under resource constrains and climate change impact.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Fundraising activity: Successfully obtained APN funding for a two-year study on water-energy nexus study for Ganges River (USD 75,000 in total).
- Progress report: Since the project just started in Aug. 2014, tangible outputs have yet been produced. A quantitative methodology for an integrated assessment of water and energy at the river-basin level has been developed.

#### Ecosystem services assessment

- A framework on ecosystem services accounting can be established in Japan.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Fundraising activity: successfully obtained funding from MOEJ (? in total).
- Peer-reviewed Articles: InVEST を用いた日本全国における窒素除去サービスの定量評価 (In 環境経済・政策研究) (2013)
- IGES research report: Unveiling Nature's Gifts: Measuring and Visualising Ecosystem Services (2014).
- MOEJ commissioned report: Assessment of biodiversity and ecosystem services (2014)

## **GE\_2 Green investment and green jobs**

#### Comparative study on green investment in Japan, Korea and China (JSPS)

- Science-based evidence on the impacts of green investment will be provided to the policy makers for making polices supporting the transition to a green economy.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Technical report: A survey report on the economic, social and environmental impacts of the supply chain of renewable energy production (solar and wind) (2013).
- Conference paper: An Impact Assessment of China's Energy Policies using MRIO Analysis (21st IIOA) (2013).
- Conference presentation: Environmental Goods and Service Sector in Japan: Classification and mapping with national input-output table for green economy assessment (UNEP international workshop) (2014).
- Working paper: Green investment in Japan (2013)
- Working paper: Review of green growth strategy in Korea (2013)

#### Green economy assessment (UNEP/PAGE and UNEP GEI-related work)

- Developing countries make national green economy strategy and implement policies supporting the transition to a green economy through UNEP/PAGE and UNEP GEI.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- GE/IGES becomes one of three Center of Excellence together with the Millennium Institute and IISD helping UNEP providing advisory services to the government in developing countries in making green economy strategies and policies through international policy process of the Partnership for Action on Green Economy (PAGE) and the Green Economy Initiative (GEI) (2013 & 2014).
- GE actively participated in UNEP-led knowledge and methodology development process in the area of quantitative assessment of green economy policies by participating in several UNEP technical workshops and reviewing 3 UNEP's publications on the "Guidance Manual for Green Economy Policy Assessment", "Using Models for Green Economy Policymaking" and "A Guidance Manual for Green Economy Indicators". IGES name are apparently recognised in these UNEP publications (2013 and 2014).
- UNEP commissioned work: GE reviewed and finalised 5 UNEP national and sectoral green economy assessment/scoping reports for African countries.
- UNEP commissioned work: GE prepared 6 green economy sectoral reports and 1 green economy scoping study for African countries. IGES are apparently recognised in the acknowledgements of these UNEP publications. For three of them, IGES logo is used together with UNEP logos.

#### Green jobs assessment (ILO Green Jobs in Asia Programme and GAIN/ILO)

- Asian countries make and implement appropriate policies supporting the creation of green jobs through ILO Green Jobs in Asia Programme and ILO Green Jobs Assessment Institutions Network (GAIN).

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Based on the MoU between ILO and IGES, IGES joined ILO Green Jobs in Asia Programme by contributing to the green jobs mapping study in the Philippines and Malaysia.
- GE helped ILO established the employment and environment-extended green DySAM (dynamic social accounting matrix) for the green jobs assessment for Indonesia, which is considered as the most advanced one in the world. Using GE's strong capacity in input-output modelling and social accounting matrix analysis, IGES contributions have been received high recognitions from ILO.
- Participated in the first international conference of GAIN/ILO and acted as a discussant contributing to the methodology development and knowledge building regarding green jobs assessment at international level (2013).

#### **GE\_3 Collaboration with stakeholders for promoting green business**

- (FY2014) IGES proposal on the green gift scheme which supports domestic renewable energy investment has been adopted by the government and will be implemented through the FY2015 government tax reform package.
- (FY2014) Recognition of IGES work has been greatly enhanced through organising large-scale open symposium (more than 400 participants), policy dialogues, massive media coverage/articles and other PR activities.

## **GE\_4 Green growth and green economy: policy process and policy dialogue**

### Development of the Japan 2050 Low Carbon Navigator

- As a handy communication tool for low-carbon energy scenario simulation, the Japan 2050 Low Carbon Navigator will support the policy discussions on determining Japan's new energy mix after Fukushima nuclear accident to ensure energy security and at the same time to make more ambitious national targets contributing to the post-2015 international climate agreement.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- The Navigator tool was developed jointly with NIES and launched during ISAP 2014.
- The development of the 2050 Navigator and cooperation with the UK DECC has been included in the UK–Japan Joint Statement on Climate Change and Energy Cooperation, signed by Prime Minister Abe during his state visit to the UK on 1 May 2014 (2014).

### Outreach

- Public participation in the policy discussions related to energy mix, climate change mitigation and the development of low carbon society in Japan can be enabled through using the Japan 2050 Low Carbon Navigator tool.
- The awareness on climate change impacts of university students can be raised and their concerns about energy and climate policies in Japan can be aroused through using the Japan 2050 Low Carbon Navigator tool.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- IGES co-organised the Taiwan International Workshop on 2050 Calculator.
- IGES has several media coverage regarding the 2050 LCN.
- IGES helped organised the Future Energy Workshop using the 2050 LCN to facilitate university students in the discussions of low-carbon society and energy mix.

## ***Findings and subsequent actions in the 2nd half of the Sixth Phase***

### **Overall findings**

During the 1st half of the Sixth Phase, the Green Economy (GE) Area made steady progress in exploring two major frontiers. One is to create an IGES niche in global, regional and national discourse on green economy and the other is to enhance its capacity in quantitative analysis on policy issues addressed by GE and other Areas.

Highlights in exploring and creating an IGES niche in global and regional discourse on green economy include:

- UNEP designated IGES as one of three Centers of Excellence supporting their Green Economy Initiative to support African countries for making national and sectoral strategies and planning for green economy. UNEP published, among others, “Guidance Manual for Green Economy Policy Assessment”, “Using Models for Green Economy Policymaking” and “A Guidance Manual for Green Economy Indicators” for which IGES has provided substantive inputs, in the area of quantitative assessment of green economy policies.
- ILO completed green jobs mapping in Malaysia, the Philippines and Indonesia. IGES joined ILO Green Jobs Programme and Green Jobs in Asia and the Pacific Project to support ILO establishing their quantitative methodology for green job mapping, i.e. employment and

environment-extended green DySAM.

Selected achievements in impacts/outcome generations at the national level in particular in Japan include:

- The Government of Japan adopted Green Gift Scheme proposed by IGES and will implement it through the FY2015 tax reform package. The scheme designed to support domestic renewable energy investment was listed in FY2014 tax reform package as an item for further consideration. A series of follow-up activities including a public symposium, policy dialogues, media coverage/articles and other PR activities has provoked a national level discussion and led to its adoption in the FY2015 package.
- The Japan 2050 Low Carbon Navigator was developed and has been attracting a wide-range of stakeholders, including governmental organisations (MOEJ and METI), academia, NGOs, and university students and related associations. The Navigator is designed as an easy-for-communication simulation tool supporting policy discussions/dialogues has been subject to many media coverage/articles since its launch in summer 2014.

Enhanced capacity in quantitative analysis, some of which directly contributed to the above mentioned significance includes:

- The Japan 2050 Low Carbon Navigator (in both Excel model and as a web tool) together with a User's Manual in Japanese and English, a quick introduction leaflet, and a research report, etc. are available on the IGES website.
- Employment and environment-extended green DySAM (dynamic social accounting matrix)
- Computable general equilibrium (CGE) model and the multi-region input-output (MRIO) model for assessing the policy impacts of sustainable resource use in terms of carbon and resource footprints
- GTAPinGAMS model for assessing the carbon tax policy in Japan and border carbon adjustment measures
- Quantification and evaluation of ecosystem services using GIS/remote sensing techniques and environmental economics
- GIS/remote sensing techniques for vegetation, land use and land use change analysis, etc.
- Integrated assessment approach based on the hydrological model and the energy system model for water and energy management at the river basin level

IGES research Areas benefited from GE's support based on its analytical expertise may include CE, NRE and IPSS.

### **Financial trends**

GE has doubled its external funding in the first half of the Sixth Phase, starting with JPY48 million in FY2013, followed by JPY122 million in FY2014. The volume is relatively small amongst all IGES research areas, however, GE has actively contributed to other Areas' external fund projects utilising their expertise in model analysis. GE has also effectively utilised IGES strategic research fund for business development. JPY0.9 million in FY2013 contributed to the success of Green Gift activities and JPY3.5 million in FY2014 has contributed to the successful launch of Low-carbon Navigator. Most of the funding is from MOEJ, and funding from non-Japanese sources including WI, ILO and UNEP only make up 4% of the amount in FY2014. In FY2015, the provisional budget is larger than that of FY2014 since LCS-RNet will be operated under GE with a large amount of external funding.

### **Actions to be taken in the 2<sup>nd</sup> half**

It is suggested that GE will continue its current approach in exploring two major frontiers, namely (i) creation of an IGES niche in global, regional and national discourse on green economy; and (ii) enhancing its capacity in quantitative analysis on policy issues addressed by GE and other Areas.

Amongst others, further promotion of the Japan 2050 Low Carbon Navigator for use by relevant stakeholders in Japan, as well as the development of a city version applicable to municipalities in Asia and other regions receives high priority in GEs operations in the 2<sup>nd</sup> half of the Sixth Phase. To this end, LCS-RNet/LoCARNet team will reunite with GE. Communication with key stakeholders in the region, as well as collaboration with NIES, a key partner in Navigator development, is expected to be strengthened with this arrangement.

As for the stabilising GE's financial situation, proactive involvement in externally funded projects led by other Areas from the planning and proposal writing stage is commendable. Each research Area which can better utilise the sophisticated quantitative expertise provided by GE is encouraged to strengthen its communication and embed such quantitative analysis components into their research design. Through this practice, opportunities for joint tool development can increase to address stakeholders' needs identified through various operations carried out by other Areas.

The basic structure of GE remains, while some adjustment will be made reflecting the aforementioned points, as shown below.

#### **Task 1: Transition to Green Economy**

This Task aims at two international policy processes. One is the Partnership for Action on Green Economy (PAGE) initiated by UNEP and the International Labour Organization (ILO). Selected as one of three Centres of Excellence of UNEP, IGES/GE will continue to contribute to UNEP green economy advisory services to support national governments in developing countries to make national and sectoral strategy and action plans on green economy. Another policy process is ILO's Green Jobs Assessment Institutions Network (GAIN). IGES/GE will continue to provide technical services and capacity building based on input-output analysis and dynamic social accounting matrix analysis.

#### **Task 2: R&D on quantitative methodologies and tools**

This Task focuses on research and development (R&D) on quantitative methodologies and tools applicable for analysing and promoting policies aimed at making a shift towards sustainability. The first set of activities explores different models and methodologies for policy assessment based on quantitative approaches. It will fully utilise existing modelling techniques within IGES including computable general equilibrium modelling (CGE), input-output analysis/multi-region input-output analysis, econometrics, and GIS and remote sensing techniques. The task will implement research projects such as the Policy Study of Environmental Economics (PSEE) on sustainable resource use and sustainability indicators, quantification and valuation of ecosystem services, and water-energy-climate nexus study.

The second set of activities has sharper focus on R&D of tools for use by target stakeholders building upon GE's various capacities on quantitative analysis. Such R&D will be implemented in close collaboration with other Areas in IGES. GE already has developed this kind of working relationship, for example with CE on the Japan 2050 Low Carbon Navigator, special mapping using GIS technology with NRE and so on. Such in-house collaboration will be continued and even strengthened.

**Task 3: Business Roles and Initiatives**

This Task 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 (Japan-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 for creation of green economy will be recommended and their implementation potential will further be sought.

**Task 4: Knowledge Platform for Facilitating Sustainable and Low-carbon Societies**

Under this Task, IGES hosts the secretariats of two research networks meeting these needs: the International Research Network for Low Carbon Society Research Network (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. As the secretariat of LCS-RNet and LoCARNet, this task will focus on strengthening impacts towards the UNFCCC COP21 and beyond. Also the task will facilitate new developments by promoting LoCARNet CoE (Centres of Excellence) coalition, and cooperation with Asia Development Bank (ADB) on their Technical Assistance (TA) project, etc. promote cooperation with other areas of IGES.

### 3-5. Business and Environment Area / Kansai Research Centre (KRC)

#### Original Area goals described in the ISRP6

*Empirical and strategic research will be carried out in the Business and Environment area to promote the expansion of sustainable business, and the innovation, diffusion and transfer of low-carbon technologies in Asia. Strategic research activities will aim to generate impacts that promote sustainable business in Asia through close collaboration with industrial groups and other stakeholders in making practical policy recommendations.*

*Aiming to further develop research in this area, focus will be put on business and environment, and also technology transfer. The research currently underway on low-carbon technology transfer from Japan to India will form the base of research. In the sphere of technology transfer in particular, the Climate Technology Centre and Network (CTCN) can assist. Thus, efforts will be made to devise strategic cooperation with this international network. Toward this purpose, cooperation with the Bangkok Regional Centre and UNEP-IETC (International Environmental Technology Centre) will be strengthened. Efforts are being made at present toward securing external funding for this cooperation.*

#### Intended Impacts/Outcomes by the Area

- *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.*

#### Task Names and Financial Trends

Unit: Thousand

No	Task	FY2013	FY2014
1	International Transfer and Application of Low Carbon Technologies	179,920	69,674 (SRF* 3,500)
2	Policies and Business Initiatives toward the Innovation and Diffusion of Low Carbon Technologies in Asia	40,667	36,141
3	International Trends and Input to Relevant Processes on Technology Transfer	0	0
	External fund	220,587	102,315
	IGES fund	0	3,500
	Grand-total	220,587	105,815

\* SRF: IGES Strategic Research Fund

## Major impacts/outcomes and/or significant building blocks in FY2013 and FY2014

### KRC\_1 International Transfer and Application of Low Carbon Technologies

- (FY2013) Japanese low-carbon technologies installed in Indian small and medium-sized enterprises were put into operation effectively, and became the basis for further enhancement of technology application.
- (FY2013) Trust with related stakeholders and IGES was built, especially with Governmental agencies, research institutes, academia, and with the private sector in India and Japan.
- (FY2014) IGES-KRC expertise became more recognised, as leading Japanese companies have approached to IGES-KRC to conduct joint projects under JCM in Vietnam and Thailand;
- (FY2014) KRC researcher(s) were invited to present at high level events such as UNESCAP forum, DSDS2014;
- (FY2014) Several proposals for joint activities were raised from Indian counterparts.
- (FY2014) An IGES proposal for JICA-SIDBI to add the heat pump technologies studied by IGES-TERI to their list of technologies eligible for finance under their credit line scheme was taken up.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Discussion Paper/Working Paper: Finance for the International Transfer of Climate Change Mitigation Technologies (2014)
- Conference Paper: Energy Efficient Operation of Induction Melting Furnaces: Insights From Field Studies (2014)

### KRC\_2 Policies and Business Initiatives toward the Innovation and Diffusion of Low Carbon Technologies in Asia

- (FY2014) IGES-KRC contributed to better understanding of business acceptability of carbon pricing and improved practical knowledge on carbon pricing policies among policy makers and experts in the three target Northeast Asian countries, by delivering timely publication.
- (FY2014) IGES-KRC contributed to further academic recognition of the importance of energy/climate policy analysis at the business level.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Peer-reviewed Articles: An analysis of company choice preference to carbon tax policy in China (In Journal of Cleaner Production) (2014)
- Policy Brief: 北東アジア 3 か国（日本、中国、韓国）における炭素排出への価格付けの実現可能性 (The Feasibility of Pricing of Carbon Emissions in Three Northeast Asian Countries: Japan, China and the Republic of Korea) (2014)
- Research Report: Market-based Instruments for Improving Company Carbon Performance in Northeast Asia (2014)

### KRC\_3 International Trends and Input to Relevant Processes on Technology Transfer

- (FY2014) IGES-KRC was directly involved in the preparation for the Tripartite Environmental Ministers Meeting (TEMM), and contributed to better awareness by the three environmental ministries regarding the actual status in the joint action plan implementation and readiness for developing the next plan.

## **Findings and subsequent actions in the 2nd half of the Sixth Phase**

### **Overall findings**

During the 1<sup>st</sup> half of the Sixth Phase, Kansai Research Centre (KRC) focused on (i) the piloting of Japanese low-carbon technologies application in small and medium-sized enterprises in India, and (ii) increasing the level of understanding on energy/climate policies, including carbon pricing, among the policy makers and business people.

Highlights in impacts/outcomes generation in low-carbon technology transfer include:

- Japanese low-carbon technologies, such as heat pump technologies for refrigeration, installed and effectively operated by Indian small and medium-sized enterprises.
- JICA-SIDBI included the heat pump technologies recommended by IGES in their financing eligibility list.

KRC expertise and reputation developed over time on its sound knowledge of low-carbon technologies that are effective and applicable in the context of Asian developing countries and this has brought new opportunities such as:

- Leading Japanese companies started approaching KRC to conduct joint projects under JCM in Viet Nam and Thailand.
- Several proposals for joint activities raised by Indian counterparts.
- KRC researchers invited to present at high level events such as UNESCAP forum and DSDS2014.

Staff members also participated in low-carbon and resilient technology transfer related operations led by other IGES Areas and contributed to impacts/outcomes generation. These operations include CTCN and Technology Needs Assessment led by CE, as well as promotion of city-to-city collaboration on air pollution between China and Japan led by BJG.

In the area of energy/climate policy research, carbon pricing policies and research findings were shared with relevant policymakers and business people, which contributed to gain the following:

- Better understanding on carbon pricing policy and its acceptability among business communities, as well as policymakers in China, Korea and Japan.
- Attention to the importance of energy/climate policy analysis at the business level among academic societies in Asian countries.

Other than the above, KRC researchers worked closely with the Tripartite Environmental Ministers Meeting (TEMM) processes and provided substantive inputs to the TEMM Joint Action Plan. Inputs included review of the implementation of the current action plan (2010-2014), and support in preparation of the next action plan (2015-2019).

### **Financial trends**

In the first half of the 6th Phase, KRC drastically decreased its external funding from JPY220 million in FY2013 to JPY105 million mainly because a large JICA-JST multiyear project on Japan-India low-carbon technology transfer was completed in FY2013. Based on the experiences developed through this technology related project, KRC is ready to take on the leadership of a technology assessment project funded by MOEJ with JPY150 million which will newly start in

FY2015 and will be a key project for KRC. Subsidies from Hyogo prefecture were stable at around JPY30 million and how to utilise this fund effectively should be an important issue in the second half of the Phase.

### **Actions to be taken in the 2<sup>nd</sup> half**

It is suggested that KRC, building upon its expertise developed over time, should further enhance its focus on low-carbon and climate resilient technology transfer and dissemination.

Sharper focus on the means of implementation, namely technology, finance and capacity building is suggested for IGES-wide climate related operations in the 2nd half of the Sixth Phase. To this end, the majority of low-carbon and climate resilient technology research including CTCN will be transferred from CE to KRC. The centre will work closely with CE and other relevant divisions of the Institute. KRC will also work closely with BRC on its new Task entitled 'Assessment and promotion of technologies dealing with Climate Change'.

As for the structure of KRC, the current Tasks with emphasis on (i) implementation of technology transfer and dissemination, and (ii) policies to propel such technology transfer and diffusion, will be maintained but renamed to clarify their focus. These tasks are closely interlinked to each other and proactive collaboration between all KRC staff members is essential. With this collaboration, the two Tasks will provide a good set of strategic research assumed by KRC.

The current Task 3 'International Trends and Input to Relevant Processes on Technology Transfer' stipulated in ISRP6 with the objectives of '*engagement in important international processes for transferring and disseminating low-carbon technologies ... (such) as CTCN (Climate Change Technology Centre Networks) ...under UNFCCC, Knowledge Management Initiative led by ADB and East Asia Knowledge Platform for Low Carbon Growth*' will be merged with Task 1.

The Task structure of KRC reflecting the aforementioned points results in:

#### **Task 1: Transfer and Dissemination of Low Carbon Technology**

This Task will focus on practical aspects of technology transfer and diffusion, which contributes to the international efforts on promoting low-carbon and sustainable technologies in developing and emerging economies in the region. The Task covers match-making of low-carbon technologies needs and seeds, for example between those in India and Japan. The focus may gradually extend to similar arrangements in other countries in the region, namely in Viet Nam and Thailand. The Task also covers multilateral schemes and practices for technology transfer, such as the CTCN.

#### **Task 2: Policy for Innovation, Transfer and Diffusion of Low Carbon Technology**

This Task will focus on policy aspects of technology transfer, ensuring close linkage with Task 1. The Task studies policies to propel innovation and transfer of low-carbon technology, including, but not limited to, carbon pricing, taxation, emissions trading schemes. Effectiveness of respective policies and/or an appropriate set of policies may be analysed, together with their contribution to the mitigation of GHG emissions and corresponding costs in a quantitative manner.

Last but not least, it should be mentioned that the longstanding subsidy from Hyogo Prefecture provides solid financial backing for strategic research implemented under the two Tasks. Together with a strong partnership developed over time with Kansai businesses and industries, assets will be wisely mobilised in the 2<sup>nd</sup> half of the Sixth Phase.

### **3-6. Integrated Policies for Sustainable Societies Area (IPSS)**

#### **Original Area goals described in the ISRP6**

*The area of Integrated Policies for Sustainable Societies will take an integrated approach to address multifaceted issues facing countries in the Asian region in the pursuit of a sustainable society, based on a long-term view. In the process of transitioning to sustainable societies, it is fitting not only to consider environmental concerns, but also to explore ways of making substantial revisions and changes in existing socio-economic systems. Various factors make up the background, such as the constantly changing state of societies, economies and the environment, as well as technological progress and improved access to information. In many cases these changes are manifested as revisions in governance related to decision-making and implementation.*

*In the Rio+20 processes, a broad consensus was made on the importance of social inclusion in the pursuit of global transition towards sustainable societies. Such a consensus was based on the common recognition on the social exclusion that exists, such as the disparity between the rich and the poor, even within a country, despite the fact of global and national economic growth. As such, this area will deal mainly with social issues faced globally, regionally, nationally and locally in the pursuit of sustainable societies, on governance and empowerment of people for enhancing participation and social inclusion. As shown below, priority issues in this area will be broadly divided into pragmatic research on “mechanisms to realise meaningful participation of stakeholders” and the “education and capacity building for sustainable development” that make this participation possible.*

*One key issue is research on the development of environmental governance that is participatory and inclusive for diverse stakeholders at multiple levels, from regional to local and municipal levels. In particular, close examination will be made of the environmental policy integration likely to occur in the context of economic integration directed at the start of an ASEAN Community (2015), as well as of trends in the TPP and additionally the economic integration that has begun between Japan, China and the ROK. For instance, implications for environmental governance in Asia will be clarified, bearing in mind the environmental institute and network for Asia proposed in a recent white paper. Furthermore, more pragmatic research will be conducted on participation in the drafting process of post-2015 development goals and sustainable development goals (SDGs).*

*Meanwhile, the empowerment of people is indispensable, with meaningful participation by diverse stakeholders as a prerequisite for a shift towards sustainable societies. Issues surrounding this, such as improved access to education and information, and the realisation of gender equity must be addressed carefully in detail. As such, strategic research activities on education and capacity development for sustainable development must be intensified and focused on more specific issues.*

*In promoting the above strategic research, coordination and cooperation with ASEAN (e.g. Environment Ministers Meeting, Secretariat), including policy input into these processes, will be essential. Further, stronger responses to environmental problems that transcend national boundaries are clearly an important issue, and deliberations on improved regional governance on transboundary air pollution will be continued.*

### Intended Impacts/Outcomes by the Area

- *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*

### Task Names and Financial Trends

Unit: Thousand

No	Task	FY2013	FY2014
1	International Processes and Governance for post-2015 and beyond	0	3,945
2	Education and Capacity Development for Sustainable Development	4,200	5,170
3	Life Style Change and Energy Consumption for Low-Carbon Cities	10,723	62,805
4	Co-benefits Approach in Asia	56,285	77,460
5	Sustainable development goals (SDGs)	70,205	64,808
6	Contribution to International Policy Processes for Sustainable Development and International Environmental Governance	0	0
	External fund	141,413	214,188
	IGES fund	0	0
	Grand-total	141,413	214,188

### Major impacts/outcomes and/or significant building blocks in FY2013 and FY2014

#### IPSS\_1 International Processes and Governance for post-2015 and beyond

##### Governance for SDGs

- (FY2013) Recommendations for improving governance (including greater emphasis on stakeholder engagement and monitoring criteria) of the Sustainable Development Goals (SDGs) and the Post 2015 Development Agenda were shared at the Open Working Group (OWG) and other relevant fora.

##### SDGs in Key Sectors

- (FY2013) Recommendations for a Learning Performance Framework (LPF) intended to help synthesise diverse views on learning processes and educational content was recognised and shared on websites from the German International Cooperation Agency (GIZ), the Independent Researchers Forum (IRF) and other institutions involved in the Decade of Education for Sustainable Development (DESD) and SDGs.
- (FY2014) Independent Researcher’s Forum (IRF) publishes and promotes energy SDG ADB on website.

#### IPSS\_2 Education and Capacity Development for Sustainable Development

##### IGES Leadership in UNESCO World Conference on Education for Sustainable Development (ESD)

- UNESCO requested IGES to coordinate a workshop under the formal conference programme

on Monitoring and Evaluation of the DESD and ESD. IGES also supported a second workshop on monitoring and evaluation as a rapporteur.

- IGES was requested by the UNEP to become a speaker for a launching event for the Sustainable Lifestyle and Education (SLE) programme under the 10 Year Framework of Programmes (10YFP) on sustainable consumption and production.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Policy Brief: Quality Education for Sustainable Development: A priority in achieving sustainability and well-being for all (2013)
- Issue Brief: Advancing Education as a Goal for Sustainable Development (2013)

#### Recognition of IGES contributions to UN DESD

- (FY2014) The UNESCO Final Report of the UN Decade of ESD cites and references IGES M&E of ESD work in four places. Japan's final report of national DESD-related activities provides a 2-page good practice case study of IGES's work. Background paper for UNESCO by Benavot (2014) on ESD in Primary and Secondary Education has multiple citations and references to IGES's work.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Policy Report: Executive Summary of Research on: Monitoring and Evaluation of Education for Sustainable Development in the Asia-Pacific Region (2013)
- Book Chapter: Findings on Implementation of the United Nations Decade of Education for Sustainable Development and how they address DESD key milestones and challenges (In Casebook on Environmental Leadership and Career Development) (2013)

#### Regional expertise on Education for Sustainable Consumption and Lifestyle

- IGES contributed as a member of the UNEP project Advisory Group on Institutional Strengthening of Education for Sustainable Consumption (ESC)
- Publication on national recommendations and guidelines of ESC for policy makers and educator was published by YPB (Indonesian institute) and UNEP. IGES contributed as an author. Also IGES co-authored the UNEP stocktaking report on Sustainable Lifestyle and Education (SLE).
- IGES took a role of the network coordinator for the Regional Network for Asia and the Pacific of the Partnership for Education and Research about Responsible Living (PERL).

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Peer-reviewed Articles: "Finding a Place for Promoting Sustainable Consumption under Korea's Green Growth Agenda: An assessment of governmental strategies in a growth oriented approach," In Korean Society (2013)
- Policy Report: (English/Indonesian) Introduction to Education for Sustainable Consumption (ESC) in Indonesia: National Recommendations and Guidelines for Policymakers and Educators (2013)
- Book Chapter (Korean) "Green Consumption, Sustainable consumption, Sustainable Lifestyle," In Korean Environmental Sociology II (2013)
- Book Chapter(Korean) " Korean Ecological Concerns and Practices," In Korean Environmental Sociology II (2013)
- Book Chapter:" Capacity for the Implementation of Education for Sustainable Consumption in Northeast Asia: Strengthening governmental strategies to promote responsible consumer behavior ," In Enabling Responsible Living (2013)

### **IPSS\_3 Life Style Change and Energy Consumption for Low-Carbon Cities**

#### City to City Collaboration

- (FY2013) A relationship between Bandung and Kawasaki city governments was developed with support by IGES to promote city-to-city exchange and facilitate low-carbon technology transfer in Asia.
- (FY2014) MOEJ awards IGES project on city-city cooperation between Bandung and Kawasaki. Project is profiled in Bandung newspaper article.

#### Urban Governance

- (FY2014) United Nations Natural Resource Forum accepts two peer reviewed articles on environmentally sustainable transport.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Conference Paper: Making Paratransit Part of the Low Carbon Solution - A case study of motorcycle taxis in Bandung, Indonesia, at the 18th Annual meeting of the society for Environmental Economics and Policy Studies (2013)
- Discussion Paper: Governing Sustainable Transport in Indonesia (2014)

#### MRV and Tools

- (FY2014) UNDESA contacts IGES about possible accreditation for completing IGES MRV in transport class.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- E-learning: Measuring, Reporting and Verification (MRV) in the Transport Sector (2013)

### **IPSS\_4 Co-benefits Approach in Asia**

#### Air-Climate Co-benefits

- (FY2013) Recommendations for strategically positioning work on short-lived climate pollutants (SLCPs) in a broader push to strengthen the integration between climate and air pollution policies is being shared with key stakeholders through the Climate and Clean Air Coalition (CCAC).
- (FY2014) World Health Organization (WHO) mainstreams SLCPs into Asia Environmental and Health Ministers work plan in consultation with IGES and partners.
- (FY2014) The Climate Change and Clean Air Coalition (CCAC) awards IGES and six other partner organisations \$525,000 to develop regional assessment on SLCPs in Asia.
- (FY2014) Stockholm Environmental Institute (SEI) invites IGES to co-author UNEP report on short-lived pollutants (SLCPs) in China.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Policy Report: Asian Co-benefits Partnership White Paper 2014: Bringing Development and Climate Together in Asia (2013)
- Policy Report: Major Developments in China's National Air Pollution Policies in the Early 12th Five - Year Plan (2013)
- Book Chapter : Tackling the Challenge of Climate Change: A Near-Term Actionable Mitigation Agenda, AOSIS (2014)
- Non peer-reviewed Articles: "Co-benefits: taking a multidisciplinary approach," Carbon Management (2013)

- Conference Paper: “Current Status and Future Potential of the Multi-pollutant Approach to Air Pollution Control in Japan, China, and South Korea”, 18th Annual Meeting of the Society for Environmental Economics and Policy Studies (SEEPS) (2013)

#### Gender Co-benefits

- (FY2014) Norwegian Development Fund (NDF) requests IGES to submit proposal for extension of ADB gender and climate project.
- (FY2014) Cambodia Ministry of Woman Affairs (MOWA) asks for IGES technical input on climate funding proposal to Cambodia Climate Change Alliance (CCCA).

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Policy Brief: Effective. Efficient. Equitable. Making Climate Finance Work for Women (ADB Gender & Climate Finance Policy Brief), Asian Development Bank (2014)
- Issue Brief: Harnessing Climate Finance for Women in Cambodia, Lao PDR, and Viet Nam: A Survey of the Policy Landscape (2013)

#### Co-benefits in Key Sectors

- (FY2014) Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (FAR) cites IGES book on transport co-benefits in Asia.

### **IPSS\_5 Sustainable development goals (SDGs)**

#### SDGs in Key Sectors

- (FY2014) UN SDGs consultation process entitled “Data revolution for sustainable development” recognises newly funded IGES cities database as possible contribution to SDGs.
- (FY2014) Asahi Shimbun Publications publishes a peer reviewed paper on SDG and biodiversity.
- (FY2013 and FY2014) Timely provision of key UN documents translated in Japanese was well recognised and enhanced understanding on the on-going processes by the stakeholders in Japan

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Policy Brief: Designing and Implementing an Energy Goal: Delivering Multi-benefits for Sustainable Development (2014)
- Peer-reviewed Articles: “Integration and Diffusion in Sustainable Development Goals: Learning from the Past, Looking into the Future,” in Sustainability 2014 (2014)
- Peer-reviewed Articles: “Towards an Integrated Framework for SDGs: Ultimate and Enabling Goals for the Case of Energy,” in Sustainability (2013)
- Policy Report: Governance and National Sustainable Development Strategies: Implications for the SDGs (2013)
- Non peer-reviewed Articles: “Millennium Development Goals: What worked well and what should new Sustainable Development Goals do differently?,” article on Independent Research Forum on Post-2015 Development Agenda website (2013)
- Non peer-reviewed Articles: “Why do we need global goals?,” article on Independent Research Forum on Post-2015 Development Agenda website (2013)
- Discussion Paper: A Quantitative Analysis of the Effect of Governance on the Millennium Development Goals (MDGs): Implications for the Post-2015 Development Agenda (2015)
- Discussion Paper: 持続可能な開発目標（SDGs）に関する国際動向：オープン・ワーキング・グループ（OWG）における各国ポジションの整理 (2014)

### Governance for SDGs

- (FY2014) A German magazine entitled Development + Cooperation publishes article on SDGs.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Non peer-reviewed Articles: “The global dimension,” in Development and Cooperation (D+C) (2014)

### **IPSS\_6 Contribution to International Policy Processes for Sustainable Development and International Environmental Governance**

- (n/a)

Other most significant outputs / academic publications published by the Area include:

- Peer-reviewed Articles: Can a low-carbon-energy transition be sustained in post-Fukushima Japan? Assessing the varying impacts of exogenous shocks (In Energy Policy) (2014)
- Peer-reviewed Articles: “Governing Sustainability Transitions in Asia: Cases from Japan, Indonesia and Thailand,” in ECO: The Korean Journal of Environmental Sociology Volume. 18, The Korean Association for Environmental Sociology (2014)
- Book chapter: “ Enabling China's Low-Carbon Transition: The 12th Five-Year Plan and the Future Climate Regime,” in The Political Economy of Renewable Energy and Energy Security: Common Challenges and National Responses in Japan, China and Northern Europe, Palgrave Macmillan (2014)

## ***Findings and subsequent actions in the 2nd half of the Sixth Phase***

### **Overall findings**

In the 1<sup>st</sup> half of the Sixth Phase, Integrated Policies for Sustainable Societies (IPSS) Area made unique outreach to global and regional stakeholders, as well as to stakeholders in Japan.

Highlights in impacts/outcomes generation include:

- Contribution to the global discourse on SDGs and the Post 2015 Development Agenda through IGES recommendations disseminated through the Open Working Group (OWG), the Independent Researchers Forum (IRF) and other relevant international fora
- Contribution to the national discourse on SDGs and the Post 2015 Development Agenda in Japan through timely provision of translations of key UN documents, which has enhanced the awareness and understanding on the on-going processes among Japanese stakeholders
- Contribution to education for sustainable development (ESD) through: Leadership in UNESCO World Conference on Education for Sustainable Development (ESD); publications on M&E of ESD and other relevant issues; being a member of the UNEP project Advisory Group on Institutional Strengthening of Education for Sustainable Consumption (ESC), and coordinating the Regional Network for Asia and the Pacific of the Partnership for Education and Research about Responsible Living (PERL)
- Promotion of city-to-city collaboration on low-carbon development between Bandung and Kawasaki

- Promotion of a co-benefits approach in Asia through the Climate and Clean Air Coalition (CCAC), and through the World Health Organization (WHO) mainstreaming SLCPs into Asia Environmental and Health Ministers work plan

Other significant achievements include:

- IPCC Fifth Assessment Report (AR5) cited IGES book on transport co-benefits in Asia.
- An Asian City Database on low-carbon technology transfer preparedness currently under development and to be ready by March 2015.

### **Financial trends**

IPSS has successfully increased external funding in the first half of the Sixth Phase from JPY141 million in FY2013 to JPY214 million in FY2014, which shows a 51% increase. In particular, city-to-city low-carbon projects have been developed under the JCM related funds from MOEJ. Co-benefit activities have also increased their funding volume with a diverse portfolio. It shows more than half of the amount was funded by non-Japanese sources such as ADB, UNEP, CAA in FY2014, although the Area-wide figure shows 20% which is a relatively high proportion in other Areas. Kanagawa funding which has been the main fund for education activities will be terminated in FY2015, and no alternative funding is yet indicative at this stage.

### **Actions to be taken in the 2<sup>nd</sup> half**

Acknowledging the aforementioned achievements and progresses made in the 1st half of the Sixth Phase, simplification of the current Tasks under IPSS is suggested together with minor readjustment of components under the respective Tasks.

Firstly, a practical arrangement has been suggested to merge Tasks 1 and 5 which share a common focus on post-2015 development agenda and SDGs. It is also suggested that components under other Tasks with cross-cutting nature, such as gender related research under Task 3 can be integrated to the new Task 1. An Institute-wide Flagship Project on the post-2015 development agenda and SDGs was established under Task 1 in early FY2014 with its focus shifted from goals and target setting to means of implementation. The Flagship Project functions as the operational hub to promote strategic outreach to the relevant global and regional processes. The suggested streamlining of relevant Tasks and components can enhance coherent operations on relevant international processes that IGES should deal with in the 2<sup>nd</sup> half of the Sixth Phase.

Secondly, because the long-standing subsidy from Kanagawa prefecture will cease at the end of FY2014, operations under the current Task 2 'Education and Capacity Development for Sustainable Development' will be moved to the PMO. It will be carried out in conjunction with its strategic operation on capacity development. During the 2<sup>nd</sup> half of the Sixth Phase, it is intended to redevelop operational and financial portfolio.

Reflecting the aforementioned changes, the structure of IPSS will be simplified as follows:

#### **Task 1: International Processes and Governance for post-2015 and beyond**

Research under this Task 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 and implementation. These recommendations will be developed in the context of the global processes for the Post 2015 Development Agenda and Sustainable Development Goals. Efforts will also be made to link to other tasks within IGES and start working on means of implementation (MOI) relating to the future SDGs, especially those that may benefit from governance-related components.

The current Task 5 on SDGs will be merged with this Task, and components under other Tasks with a cross-cutting nature, such as gender related research will also be merged.

### **Task 2: Intercity Collaboration for Low-Carbon Development**

In collaboration with the related research on low-carbon cities being conducted by Kitakyushu Urban Centre (KUC), this Task promotes relevant practical studies with environmentally advanced cities in the Kanto region (Tokyo, Yokohama, Kawasaki etc.) Through the coordination and dissemination of experiences in sustainable city planning that have been promoted in Japan, plans are being made to transfer knowledge that can contribute to low-carbon, sustainable development in cities in Asia.

### **Task 3: Co-benefits Approach in Asia**

This Task will identify opportunities and constraints for mitigating climate change and achieving other co-benefits. The research will entail 1) quantifying co-benefits to analysing how the science-policy interface influences co-benefits from abating short-lived climate pollutants (SLCPs), 2) the political economy of key sectors influences co-benefits from mitigating greenhouse gases (GHG); 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 (United Nations Framework Convention on Climate Change (UNFCCC)), and SDGs policy processes at multiple levels.

Last but not least, it is important to promote further cross-area collaboration between IGES Areas with strong urban focuses, such as KUC, IPSS, CE, BJK and SCP. Adaptation team in NRE also has a research component on multi-municipalities collaboration for climate resilient development planning. A cross-area collaboration mechanism will be developed, likely to be led by PMO and facilitate communication, joint projects and other activities in due course.

### 3-7. Sustainable Cities Area / Kitakyushu Urban Centre (KUC)

#### Original Area goals described in the ISRP6

*In the Sustainable Cities area, strategic research activities will be carried out on concrete measures to achieve the necessary policy integration for sustainable development at the city level. Research will focus on effective initiatives at the local government, resident and citizen group level that aim to promote reduced pollution, low-carbon and environmentally sustainable development in Asia, particularly in ASEAN cities. Research will be conducted on measures to further promote and expand these initiatives. Practical activities to promote and expand these initiatives will involve active participation in the networks and collaboration activities among environmental model cities, as well as the transmission and dissemination of concrete recommendations.*

*To this purpose, the focus on cities at the Kitakyushu Urban Centre will be further strengthened. Cooperation with cities in Asia, particularly ASEAN cities, will be continued and firmly advanced. Likewise, research on scenario analysis and the establishment of MRV systems for the concrete development of low-carbon measures in cities will be promoted jointly with NIES and universities. Strengthened cooperation will be essential under SATREPS (Science and Technology Research Partnership for Sustainable Development), such as on the Iskandar Project (Malaysia) promoted by NIES. Further, collaboration on low-carbon initiatives in other cities in Japan and with ICLEI (International Council for Local Environmental Initiatives) is important.*

*Strategic research activities in this area will be carried out based on close cooperation between IGES Headquarters and the Kitakyushu Urban Centre. Further, networking and collaboration activities will garner the participation of as many cities as possible of Japan and other Asian countries.*

#### Intended Impacts/Outcomes by the Area

- *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*

#### Task Names and Financial Trends

		Unit: Thousand	
No	Task	FY2013	FY2014
1	Policy Research on Low-Carbon and Resilient Cities	11,863	181,039 (SRF* 3,000)
2	Action Research on Efficient Use of Local Resources	101,997	35,819
3	Networking with Cities and Other Organisations	36,497	82,297
4	Collaboration with Partners in Kitakyushu	10,542	23,950
	External fund	160,899	320,105
	IGES fund	0	3,000
	Grand-total	160,899	323,105

\* SRF: IGES Strategic Research Fund

## Major impacts/outcomes and/or significant building blocks in FY2013 and FY2014

### KUC\_1 Policy Research on Low-Carbon and Resilient Cities

#### Development of low-carbon action plans

- (FY2013) Development of low-carbon action plans in selected five cities including Ho Chi Minh City (Viet Nam), Surabaya (Indonesia), Nonthaburi and Phitsanulok (Thailand) and Cebu (the Philippines).
- (FY2014) Low-carbon projects were further developed in two sectors, energy and solid waste management, in Surabaya, Indonesia, and a related session was organised at Japan Pavilion of COP20 in Lima, Peru in December [JCM Surabaya: MOEJ]; related JICA Indonesia-funded project for formulating energy efficient policies in cooperation with Ministry of Finance in Indonesia was cancelled (applied though)
- (FY2014) Low-carbon projects were identified in three sectors, energy, solid waste and Cat Ba Island, in Hai Phong, Viet Nam. [JCM Hai Phong: MOEJ] Also in Palau, Low-carbon projects were identified in the solid waste management sector [JCM Palau: MOEJ]
- (FY2014) Capacity building support for measuring GHG emissions was extended to Ho Chi Minh City, Viet Nam, and Phitsanulok, Thailand [JCM HCMC; APN]

#### Compilation of Sustainable City Policies

- (FY2014) JICA Training for NAMA/MRV (low-carbon city planning) capacity building was organised in September [NAMA/MRV Training: JICA]
- (FY2014) Low-carbon policies on public transportation and energy management were compiled [IGES Strategic Fund]
- (FY2014) Other knowledge products were compiled as contents of the database

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Peer-reviewed Articles: 上海市民への防災意識調査から見る意識向上の重要性 (Importance of awareness recognised from the survey on citizen consciousness about disaster prevention and reduction in Shanghai). In 東アジアへの視点 北九州発アジア情報 (2014)
- Peer-reviewed Articles: Planning Resilient Cities: Lessons from the Philippines. In Proceedings of the 9th International Symposium on City Planning and Environmental Management in Asian Countries (2013)
- Book Chapter: Municipal Solid Waste: The Burgeoning Environmental Threat. In Handbook of Environment and Society, Routledge. (2013)
- Conference Paper: Planning Resilient City in Cebu: Lessons Learned and Practical Application. In Proceedings of International Workshop and Conference on Re-shaping Urban Coastal Landscapes (2013)

### KUC\_2 Action Research on Efficient Use of Local Resources

#### 3R Strategies

- (FY2013) Development of national strategic plan for food waste management in Malaysia, 3R strategies in Viet Nam and Indonesia, and solid waste management strategies in Nairobi, Kenya and Saanku, Nepal.
- (FY2014) Food waste management strategy was developed and pilot data collection from selected companies started in Malaysia [Malaysia 3R: MOEJ]
- (FY2014) Draft 3R guideline for local authorities was developed in Viet Nam [Viet Nam 3R: MOEJ]

- (FY2014) A concessionaire company was selected and started waste collection operation in a pilot area in Nairobi, Kenya [Nairobi 3R: JICA]
- (FY2014) Composting facility was established in Surabaya, Indonesia [Surabaya Nishihara: JICA (thru. NTT Data Institute of Management Inc.)]

#### Decentralised solid waste management and composting

- (FY2014) Solid waste management policy research was conducted in Cebu, the Philippines and Surabaya, Indonesia [CCAC: UNEP]
- (FY2014) Technological options for GHG emissions reduction in energy and solid waste management sectors were summarised in Sri Lanka [CTCN: MOEJ thru IGES CE]
- (FY2014) JICA composting management training; Composting management training for JICA volunteers; Composting training for children in cooperation with Kyushu Institute of Technology (KIT)
- (FY2014) Decentralised water purification system was installed in Surabaya, Indonesia [Surabaya water: JICA Grassroots]

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Peer-reviewed Articles: Policy Implementation of the Republic Act (RA) 9003 in the Philippines: A Case Study of Cebu City. In Waste Management (2013)
- Peer-reviewed Articles: 互惠的な日中都市間連携の構築について—JICA 草の根技術協力2事業への考察を通して—. In 東アジアへの視点 (2013)
- Peer-reviewed Articles: Financial Sustainability of Modern Composting: The Economically Optimal Scale for Municipal Waste Composting Plant in Developing Asia. In International Journal of Recycling of Organic Waste in Agriculture (2014)
- Book Chapter: National Strategic Plan for Food Waste management in Malaysia (Draft) (2013)

#### **KUC\_3 Networking with Cities and Other Organisations**

- (FY2013) Contribution to maintenance of the platform for the High Level Seminar on Environmentally Sustainable Cities (ESC) under the framework of the East Asia Summit Environment Ministers Meeting.
- (FY2014) 6th High Level Seminar on Environmentally Sustainable Cities was held in February in Johor Bahru, Malaysia [HLS: MOEJ]
- (FY2014) ASEAN ESC Model Cities Year 2 started implementation in 8 ASEAN countries [ESC Model Cities: JAIF]

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Policy Report: National City Awards as a Practical Approach to Encourage Local Government Initiatives for Sustainable Cities(2013)
- Proceedings: 4th High Level Seminar on Environmentally Sustainable Cities (2013)
- Proceedings: 5th High Level Seminar on Environmentally Sustainable Cities (2013)

#### **KUC\_4 Collaboration with Partners in Kitakyushu**

- (FY2014) Sustainable Design Forum in Kitakyushu was held in May (in cooperation with NPO Satoyama)
- (FY2014) Students from University Putra Malaysia (UPM) were accepted in December in cooperation with Kyushu Institute of Technology under the Sakura Science Program [JST]

- (FY2014) Lectures at JICA Kyushu, Kitakyushu Univ., Nishinohon Institute of Technology, Kitakyushu Special Engineering High School
- (FY2014) GHG emissions reduction impacts and potentials by the implementation of Kitakyushu City-led cooperation projects was summarised

## ***Findings and subsequent actions in the 2nd half of the Sixth Phase***

### **Overall findings**

In the 1<sup>st</sup> half of the Sixth Phase, Kitakyushu Urban Centre (KUC) focused on diverse issues on sustainable urban development. Activities included policy research, support for implementation, capacity building, and the facilitation of networking and information sharing between advanced and well-minded cities in the region. KUC also worked closely with Kitakyushu City and other local partners, such as JICA Kyushu, and effectively mobilised expertise accumulated by the municipality over time, as well as providing KUC's knowledge for various opportunities provided by its local partners.

Highlights in impacts/outcomes generation in the promotion of low-carbon and resilient development policies/ practices in Asian cities include:

- Advanced cities in Asia developed their low-carbon action plans with support from KUC, namely Ho Chi Minh City (Viet Nam), Surabaya (Indonesia), Nonthaburi and Phitsanulok (Thailand) and Cebu (the Philippines).
- Advanced cities in Asia developed and implemented low-carbon projects through JCM city-to-city collaboration scheme and other arrangement mediated by IGES, namely Surabaya (Indonesia), Hai Phong (Viet Nam) and cities in Palau.

Continuing efforts by KUC on promoting national strategy on efficient use of local resources are materialised in FY2014 and significant impacts/outcomes are observed as:

- Draft National Food Waste Management Strategy was developed in Malaysia, and piloted by selected companies
- Draft 3R Guidelines for Local Authorities was developed in Viet Nam

Highlights in the facilitation of networking and information sharing among the environmentally sustainable cities include:

- The 6th High Level Seminar on Environmentally Sustainable Cities held in February 2015 in Johor Bahru, Malaysia
- ASEAN ESC Model Cities Programme provided a boost to the implementation of National ESC programmes in 8 ASEAN countries. Amongst others, national programmes in Cambodia, Thailand and Viet Nam have been strengthened through ASEAN ESC Model Cities Programme.

### **Financial trends**

KUC doubled its external funding volume in the first half of the 6th Phase, starting with JPY161 million in FY2013, followed by JPY323 million in FY2014. KUC is a pioneer in city-to-city collaborative activities for 3R and low-carbon issues, and has conducted a number of city-level external-funded projects in Asian countries as well as in Japan. Funding resources are diverse and include MOEJ, JICA, ASEAN, UNEP, as well as private companies. It should be also mentioned

that many of their activities are in full collaboration with Kitakyushu city which has stably supported KUC with JPY20 million of subsidies annually. In the second half of the Phase, KUC will likely receive a lower level of funding.

### **Actions to be taken in the 2<sup>nd</sup> half**

It is suggested that KUC will continue its current course of action in the 2nd half of the Sixth Phase. The KUC structure will be maintained as follows:

#### **Task 1: Policy Research on Low-Carbon and Resilient Cities**

This Task will focus on multiple issues faced by cities in Asian developing countries, by applying a cross-cutting approach and analysing relevant policies and practices. Activities include research and capacity building on low-carbon policies on energy, transportation, solid waste and water management, as well as on transformative approaches to urban and land-use planning.

#### **Task 2: Action Research on Efficient Use of Local Resources**

This Task will focus on various action research such as: Promotion of resource efficient and 3R (reduce, reuse and recycle) policies at the national level; promotion of decentralised community-based resource and waste management system including organic waste and biomass utilisation and wastewater treatment; and promotion of local resources management including water, forests and energy

#### **Task 3: Networking with Cities and Other Organisations**

Through this Task, KUC serves as the secretariat of both the ASEAN ESC Model Cities Programme and the High Level Seminar on Environmentally Sustainable Cities, and uses these platforms to facilitate networking and collaboration among stakeholders.

#### **Task 4: Collaboration with Partners in Kitakyushu**

Through this Task, KUC, as a core constituent of the Kitakyushu Low Carbon Center for Asian Society, strategically collaborates with Kitakyushu City Government and related stakeholders, to extend sustainable city policies, practices, management systems and technologies to other cities in developing countries.

Last but not least, it is important to promote further cross-area collaboration between IGES Areas with a strong urban focus, such as KUC, IPSS, CE, BJK and SCP. Adaptation team in NRE also has a research component on multi-municipalities collaboration for climate resilient development planning. A cross-area collaboration mechanism will be developed, likely to be led by the PMO and which will facilitate communication, joint projects and other activities in due course.

### 3-8. IGES Regional Centre (BRC)

#### Original Area goals described in the ISRP6

The Bangkok Regional Centre will cooperate with Headquarters and other centres to further expand the international network. The Centre already plays a leading role in the Asia Pacific Adaptation Network (APAN). Based on experience and credibility gained in this network, the Centre will proactively work to become even more involved in useful networking activities. The Centre already successfully operates a network based on cooperation between ODA (official development aid) granting organisations from the United States and Europe, and will further consolidate this know how. Cooperation is materialising with the Kitakyushu Urban Centre. In the sphere of mitigation, the Bangkok Regional Centre will join forces with sections at Headquarters to engage in appropriate support for and participation in the operation of the newly established LoCARNet and low-carbon platforms.

#### Intended Impacts/Outcomes by the Area

- 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.

#### Task Names and Financial Trends

BRC Unit: Thousand

No	Task	FY2013	FY2014
1	Networking and Capacity Development for Climate Change Adaptation	63,701	133,548
2	Networking and Capacity Development for Environmental Safeguards and Sustainable Development	27,890	36,772
3	Networking and Outreach from Bangkok	0	0
	External fund	91,591	170,320
	IGES fund	0	0
	Grand-total	91,591	170,320

#### Major impacts/outcomes and/or significant building blocks in FY2013 and FY2014

##### BRC\_1 Networking and Capacity Development for Climate Change Adaptation

- (FY2013) Capacity of key stakeholders, especially government officials in dealing with climate change adaptation or environment impact assessment issues was increased by IGES along with APAN partners providing learning various learning opportunities such as workshops/conferences and web-based knowledge-sharing.

##### Mainstreaming adaptation in Asia and the Pacific with the APAN capacity development activities

- (FY2014) The issue of climate change adaptation was further mainstreamed into governments' development plans in countries in Asia and the Pacific by IGES along with a number of APAN partners including UNEP and ADB by organising the 4th Adaptation Forum where

approximately 500 participants from various sectors from 50 countries gathered. Adaptation actions in the region was scaled up IGES along with APAN partners networking and engaging with a number of institutes including Rockefeller Foundation, TEI, RECOFTC, ADB-EOC.

- (FY2014) Knowledge base of climate change in the region was raised by IGES along with APAN partners, especially USAID Adapt Asia-Pacific, providing an improved regional knowledge sharing platform, contributing to climate change adaptation policy making.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- 4th Adaptation Forum's major outcome, presentation materials, media coverage and other materials are published online.
- Knowledge products, adaptation technology database, events and news are made available at: <http://www.asiapacificadapt.net/>

#### Capacity development and knowledge management in adaptation with the USAID Adapt Asia-Pacific

- (FY2014) Capacity of government officials in 27 countries in Asia and the Pacific in accessing adaptation funds and preparing adaptation projects was increased by IGES working with the USAID Adapt Asia-Pacific project and organising the 3rd USAID Adapt Asia-Pacific Annual Forum in partnership with UNDP under the theme: "Strengthening Country Systems to Access and Manage Climate Change Adaptation Finance in Asia and the Pacific," which provided around 60 target government officials with intensive learning opportunity. Understanding and capacity were also raised by IGES conducting e-mail-based discussions (The Exchange Series) as a community of practice (CoP) activity and publishing knowledge products and newsletters.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Main outcome and materials of the Forum on Strengthening Country Systems to Access and Manage Climate Change Adaptation Finance in Asia and the Pacific were published online.
- Other published knowledge products are made available at: <http://adaptasiapacific.org/resource-library>

#### **BRC\_2 Networking and Capacity Development for Environmental Safeguards and Sustainable Development**

##### Strengthening environmental and social safeguards with the AECEN

- (FY2014) Capacity of government officials in dealing with environmental and social safeguards in selected countries in Asia including Sri Lanka, Lao PDR, and other ASEAN countries was increased by IGES conducting AECEN's south-south cooperation project and organising workshops with support from ADB, USAID, and the Ministry of the Environment of Japan in collaboration with various leading agencies including OECD, ADB Greater Mekong Sub-region - Environment Operations Center (GMS-EOC), ASEAN Secretariat, and USEPA.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Main outcome and related materials of the Capacity Development Workshop - Twinning Partnerships on EIA: Lao PDR-Japan and Sri Lanka-Japan were published online.
- Main outcome and related materials of the Regional Workshop on the Conduct of Environmental Performance Assessment in the Greater Mekong Sub-region and ASEAN Region were published online.
- Main outcome and related materials of the Environmental Impact Assessment Policy and Practice in the Mekong Region: Safeguarding Sustainable Development were published online.

Promoting sustainable development planning with the Network for Integrated Planning and Sustainable Development Strategies in Asia-Pacific Region (SDplanNet-AP)

- (FY2014) Capacity of the government officials and practitioners in the region in dealing with sustainable development planning and preparation for the SDGs was increased by IGES organising/ co-organising SDplanNet s' regional and global workshops. IGES was invited to the side event hosted by SDplanNet and the GN-NCSDS at the United Nations High Level Political Forum meetings in New York in July to make inputs.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Main outcome and related materials of the 2014 Regional Sustainable Development Transition Series: Asia-Pacific Workshop were published online.

**BRC\_3 Networking and Outreach from Bangkok**

- (FY2014) Engagement with local practitioners from development agencies, research institutes and other partners in Bangkok was increased by IGES organising two Evening Cafes on the topics of urban governance and gender consideration in climate change adaptation proposal writing. The former event which featured Prof. Ryokichi Hirono drew participation from media and resulted in an article on the Bangkok Post.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Summary of the events and media coverage were published online.

**IGES-wide Activities**

- (FY2013) Understanding to the regional or national environmental status and associated issues were raised by IGES contributing activities such as the United Nations Environment Programme (UNEP)'s Environmental Outlook projects in Bhutan, Myanmar and South Asia, training for the African Development Bank, and promotion of green economy and green economy for Myanmar.

**Findings and subsequent actions in the 2nd half of the Sixth Phase**

**Overall findings**

During the 1st half of the Sixth Phase, Bangkok Regional Centre (BRC) mainly focused on networking and capacity building on two priority issues in the region, namely (i) climate change adaptation, and (ii) environmental safeguard and sustainable development.

In the area of climate change adaptation, BRC promoted mainstreaming of adaptation in Asia and the Pacific through knowledge sharing and capacity building activities of APAN and USAID Adapt Asia-Pacific. Highlights of such the activities include:

- The 4th Asia-Pacific Climate Change Adaptation Forum convened in October 2014 in Kuala Lumpur, Malaysia attended by over 500 climate change adaptation practitioners, who were joined by public and private sector officials and top experts from 50 countries. It provided an outstanding opportunity for the participants to learn, share and network on unique activities carried out in the region.
- The 3rd USAID Adapt Asia-Pacific Annual Forum convened in September 2014 in Siem Reap, Cambodia participated by 60 target government officials provided them with intensive 16 hours of training on strengthening country systems to access and manage climate change adaptation finance.

Highlights in environmental safeguard and sustainable development include:

- Promotion of South-South cooperation through AECEN twinning programme, which has been effective in capacity development of the government officials dealing with policies to strengthen environmental/social safeguards

In addition, BRC piloted its outreach and networking with local practitioners from development agencies, research institutes and others stationed in Bangkok, for which BRC convened:

- Two Evening Cafes on the topics of urban governance and gender consideration in climate change adaptation proposal writing. These events drew practitioners from various organisations in town and gave opportunities for BRC to present its activities and discuss possible collaboration as well as received media coverage in Bangkok Post.

BRC staff members also led and/or participated in various global and regional activities of IGES, such as:

- United Nations Environment Programme (UNEP)'s Environmental Outlook projects in Bhutan, Myanmar and South Asia
- Training for the African Development Bank, and
- Promotion of green economy and green economy for Myanmar.

### **Financial trends**

BRC has increased its external funding in the first half of the Sixth Phase, from JPY217 million in FY2013 to JPY352 million in FY2014. The funding volume is relatively low among Areas, however, BRC has contributed to other Area's external funding activities such as EIA project, utilising their staff of international and local experts. The portfolio of external funding is diverse, and the ratio of overseas funds out of the amount is 22% in FY2014. BRC has not conducted many microprojects but medium-scaled multi-years projects funded by USAID, UNEP and ADB, which have brought a rather seamless financial base.

### **Actions to be taken in the 2<sup>nd</sup> half**

Building on the BRC's assets developed over time, i.e. strong professionalism in networking and capacity building, it is suggested that BRC should engage in the following operations in the 2<sup>nd</sup> half of the Sixth Phase.

#### **Task 1: Networking and Capacity Development for Climate Change Adaptation**

This Task will focus on capacity development for Climate Change Adaptation in the region through training modules/materials to meet stakeholders needs. Collaboration with NRE Adaptation team will be further strengthened to seek ground-level activities and project implementation with partner development agencies such as ADB and USAID.

#### **Task 2: Networking and Capacity Development for Environmental Safeguards and Sustainable Development**

This task will provide learning opportunities for government officials and key stakeholders in charge of environmental safeguards, environmental compliance and enforcement, and sustainable development, through activities organised by the AECEN and the SDplanNet-AP.

#### **Task 3: Assessment and Promotion of Technologies dealing with Climate Change (New)**

This task will provide government officials and key stakeholders in charge of climate change mitigation with better technology or policy options through assessing mitigation technologies and

their effective applications. It will be implemented with AIT.RRC, in close collaboration with CE and KRC.

**Task 4: Accommodation of IGES functions drawing on the advantage of BRC**

BRC has a geographical advantage over other IGES offices in terms of its better access to various IGES's partners, not only those stationed in Bangkok, but also those in other places in Asia and the Pacific. BRC already accommodates a few operations carried out by other Areas, such as ASEAN ESC Model Cities Programme operated by KUC and institution-wide activities on SDGs and Post-2020 agenda led by IPSS. This accommodation function will be enlarged and extended to such activities as the preparatory work on the potential establishment of CDM Regional Collaboration Centre with UNFCCC.

### 3-9. Beijing Office (BJG)

#### Original Area goals described in the ISRP6

*The Beijing Office will carry out necessary activities to contribute to bilateral cooperation between China and Japan on environmental issues. Specifically, it will continue to promote measures and activities closely related to the development of China's new environmental policies, including the set-up and diffusion of simple design waste water treatment facilities. Further, close and constant attention will be paid to the startup of a new structure for deliberation on a climate change strategy in China, and to the drafting of new policies. Steady operations will be carried out in an appropriate and timely manner based on the MOU (Memorandum of Understanding) between the environment ministers of Japan and China. Further, necessary contributions will be made while cooperating with other departments concerning policy development aside from China's bilateral relations, including the appropriate manner of cooperation with the China-ASEAN Environmental Cooperation Centre.*

#### Intended Impacts/Outcomes by the Area

- *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.*

#### Task Names and Financial Trends

Unit: Thousand

No	Task	FY2013	FY2014
1	Research Activities in the area of water environment	94,500	90,126
2	Research Activities in the area of air pollution		125,617
	External fund	94,500	215,743
	IGES fund		0
	Grand-total	94,500	215,743

#### Major impacts/outcomes and/or significant building blocks in FY2013 and FY2014

##### Cooperation Project on Total Pollutant Reduction of NH3-N etc. in Small Towns and Rural Areas in China

- (FY2013) Proposal of a draft framework of Sino-Japan inter-city cooperation for air quality improvement in China.
- (FY2013) Construction of a model wastewater treatment facility in a rural area (small town) of Deyang city in Sichuan province.
- (FY2014) IGES completed construction of three model water treatment facilities in Shandong province, Sichuan province and Zhejiang province. These model facilities were meant to reduce water pollutants such as ammonia nitrogen etc. IGES, with cooperation of Ministry of the Environment, Government of Japan (MOEJ) and Ministry of Environmental Protection of the

People's Republic of China (MEP), constructed the model facilities and also completed test operation and monitoring of these model facilities.

Major outputs contributed to the above impacts/outcomes include, but not limited to:

- Peer-reviewed Articles: 中国における大気汚染の規制強化と対応策およびその課題 (Agenda for regulation tightening and solutions of air pollution in China), In 化学物質と環境 (2014)
- Book Chapter: (In Chinese) 中日水汚染物総量制御研究 (China-Japan research on water pollution control) 2013
- Non peer-reviewed Articles: 中国の PM2.5 による大気汚染 (Recent Heavy Air Pollution in China), In 日中医学 (2013)
- Non peer-reviewed Articles: 2013 年中国激甚大気汚染事件の顛末 (2013 Heavy Air Pollution Episode in China), In Environmental Management June,2013 (2013)
- Non peer-reviewed Articles: 中国大気汚染対策 日本の克服経験生かせ (Measures of air pollution in China, Capitalise the experience of overcoming in Japan), In 読売新聞「論点」 (2014)

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

- (FY2014) At the decision making scenes in China, understating has been raised on necessity of taking countermeasures against climate change, and also on necessity of options for countermeasures against climate change. IGES planned and implemented “Low-Carbon training course” for members of the National Development and Reform Commission (NDRC) and also members of the local DRC, with cooperation from MOEJ and NDRC.
- (FY2014) 10 local governments in Japan started communication and cooperation with respective Chinese counterpart cities to strengthen programs on protection of air quality. In order to materialise these communication and cooperation between cities in Japan and China, IGES promoted cooperation between the local cities in Japan and China, and also promoted exchange of information between them. IGES also provided support on inviting trainees from China to Japan, and on dispatching experts from Japan.

Other most significant outputs / academic publications published by the Area include:

- Non peer-reviewed Articles: 「中国発」シリーズ(Series of online article “From China”), On EIC Net website
- Non peer-reviewed Articles: 現地滞在レポートシリーズ第 19～29 回 (Inside China Report No. 19-29), In GLOBAL NET
- Non peer-reviewed Articles: シャオリュウの中国環境ウォッチ 1～15 (Shao Liu's Watch for China's Environment No. 1-15), In 環境新聞
- Non peer-reviewed Articles: シャオリュウの東奔西走中国環境記シリーズ 第 76～78 回(Shao Liu's article on environment - Crisscross the China No. 76-78), In 環境パートナーズ

## **Findings and subsequent actions in the 2nd half of the Sixth Phase**

### **Overall findings**

During the 1st half of the Sixth Phase, Beijing Office (BJG) has been materialising its objective to *'serve as an important bridge and a reliable platform between China and Japan to further promote environmental bilateral cooperation between the two countries'* with focuses on two priority environmental issues, namely (i) reduction of NH<sub>3</sub>-N and other pollutants in small towns and rural areas in china, and (ii) promotion of city-to-city cooperation on air pollution between local and national governments in China and Japan. Both issues have been identified through continuing policy dialogues between the governments of China and Japan and addressed by the BJG Office.

The 'Cooperation Project on Total Pollutant Reduction of NH<sub>3</sub>-N etc. in Small Towns and Rural Areas in China' that has continued seven years since FY2008 will end in FY2014 with the following achievements and some follow-up activities identified:

- Eleven (11) model facilities were installed in nine regions, which has demonstrated the effective waste water treatment in the rural area in China
- Necessary follow-up is the nation-wide dissemination of lessons learnt from the construction and operation of model facilities
- Policy recommendations for strengthening waste treatment system in rural areas in China, addressing technological and management aspects, are under preparation as part of a JICA project started in FY2014, aiming at its submission to the Government of China in September 2017

As for the promotion of city-to-city cooperation on air pollution, BJG swiftly initiated this project in April 2013 responding to the need identified by the Governments of China and Japan, as severe and consecutive air pollution was observed in China in January 2013 and onwards. Highlights in the progress include:

- Ten (10) local governments in Japan started communication and cooperation with respective Chinese counterpart cities to strengthen programs on protection of air quality; information sharing between cities in Japan and China is promoted; and capacity building for Chinese government officials convened
- BJG is playing the key role, as a reliable platform between China and Japan, in promoting policy dialogues at national and local levels, as well as in fostering further concrete cooperation such as joint research and model projects implementation
- The project continues until FY2018

Last but not least, BJG also contributed to raising awareness of members of the National Development and Reform Commission (NDRC) and the local DRC on the necessity and options of countermeasures against climate change, by convening a "Low-Carbon training course."

### **Financial trends**

BJG has doubled its external funding volume in the first half of the Sixth Phase, starting with JPY94 million in FY2013, followed by JPY215 million in FY2014 which is quite a high level of volume considering the number of staff. BJG's activities have focused on water pollutant issues as well as co-benefit issues which are funded by MOEJ and JICA. In FY2015, the amount of fund volume will be slightly reduced, however, the financial status in terms of internal profit could be further advanced by reviewing business structure.

### **Actions to be taken in the 2<sup>nd</sup> half**

It is suggested that BJG continues the current course of actions, gradually shifting its major focuses from rural waste water treatment to air pollution, responding to the priority issues mutually agreed between the Governments of China and Japan. The structure of BJG remains as it is and specific Tasks are identified as follows:

#### **Task 1: Research Activities in the area of water environment**

This Task aims at establishing a model of wastewater treatment system and its management system which is suitable for rural areas in China, through a Japan International Cooperation Agency (JICA) project entitled “Project on establishing wastewater treatment system and its management system for rural areas in China.”

#### **Task 2: Research Activities in the area of air pollution**

This Task will focus on the improvement of air pollution in China through coordination of local governments both in Japan and China to take countermeasures against air pollution. Activities include coordination between local governments in Japan and China, organisation of seminars, and implementation of training courses.

## 4. Review of IGES Management

### 4-1 PMO

The PMO was intended to be strengthened in the Sixth Phase by establishing three senior coordinators and a flagship team, for improvement of overall strategic operations of IGES, and for production of timely flagship products with improved quality. The former Research Support Section of the Secretariat was transferred to the PMO at the beginning of the Sixth Phase.

As detailed below, certain progress has been made on each front of IGES overall operations. Overall planning and management has made each research staff member more target-oriented, outreach/networking has improved the visibility of IGES and helped impact generation, capacity development/knowledge management has assisted in generating synergy among different Areas within IGES, and quality management has ensured improvement of IGES products.

Although not detailed below, PMO has two other important functions, i.e. incubation and fundraising. The first function is to take up new projects which are not currently handled by any specific Area of IGES, but that are considered important. At the beginning of the Sixth Phase, one project classified as such was research on the governance of Fukushima decontamination operations. Then, in FY2014, a comprehensive study on EIA implementation in selected Asian countries was added to the list. This project is being carried out in coordination with BRC, as part of their safeguards component. Fundraising is another important function of the PMO. Quite a few opportunities for new funding have been identified, facilitated and realised by the PMO.

A number of shortcomings still remain. For example, the management systems that have been developed may be too complicated to improve efficiency. Production of a flagship product has failed to meet its original deadline. There are still some difficulties in producing publications with sufficient quality in a timely manner for certain important policy processes. These issues will be discussed below in detail. Solutions to these problems should be addressed as practically as possible, recognising the reality surrounding IGES researchers. Indeed, an increasing amount of their time is being used for coordination, communication and other management activities necessary for externally funded projects.

In addition, there is another requirement for the PMO. The service functions of the PMO need to be more efficient. This will be particularly urgent in the second half of the Sixth Phase, because the long-standing subsidy from Kanagawa Prefecture will be reduced to zero starting from FY2015.

#### PMO Operating Costs

(Unit: Thousand yen)

FY2013 Result	FY2014 Prediction
17,634	24,215

## **(1) Overall Planning and Coordination**

### **(1-1) Milestone Management System**

The Milestone Management System was enhanced in the first half of the Sixth Phase. The System partly started providing support for structural goal setting, namely impacts, outcomes and outputs/activities, in each research Area and Task. Relevant policy processes, stakeholders, approaches and timing for intended impact have increasingly been clarified. However the System has not yet reached the level of providing useful information to support timely and quality delivery of planned outputs and activities, or to support quick and effective match-making of needs and seeds of in-house expertise.

#### Promotion of strategic planning

Milestone Management has two layers of exercises. The first layer is to clarify the aforementioned goals and targets in each Area and Task. To this end, the Area and Task Summary was introduced in FY2014 and elaborated in FY2015, which has provoked relevant discussions among staff members. In addition, a working paper entitled 'The Framework of IGES Impact Generation Strategy' contributed to the shaping of a common understanding on means (outputs/activities) and goals (impacts/outcomes). In this exercise, Area Leaders have been encouraged to draw clear goals and basic impact generation strategies at the Area programme level, so that Task Managers can draw further detailed goals and strategies in their Task Summary. Milestones such as specific outputs and activities should be identified in the Task Summary, together with a clear timeline.

#### Promotion of timely delivery and appropriate resource allocation

The second layer of the Milestone Management is to ensure high quality and timely delivery of planned outputs and activities, as well as to ensure appropriate staff time allocation to respective operations. To this end, an IT-based management system was developed and introduced in the middle of FY2014. The System handles essential parameters such as (i) milestones (outputs/activities) and deadlines, (ii) workdays committed for each staff members, (iii) workdays used by each staff members. In addition to these basic parameters, information on personnel cost coverage by external funding is provided from the Budget Control System.

The System is designed to provide information useful for all staff members concerned including Researchers, Task Managers, and Area Leaders. For example, each researcher can confirm which milestones they are responsible for, how much time he/she is committed to, and how such products and activities are linked to the Task and Area for impact generation strategies. Task Managers and Area Leaders can benefit from summary information at the Task and Area levels respectively.

However, the System is not yet popular or well-utilised, partly due to the fact that its introduction could not be made at the beginning of FY2014 but was delayed until the middle of the fiscal year. Other reasons may include its complexity and unfriendly user interface. The good news is that some ALs and TMs find the System useful to some extent despite the aforementioned points. Therefore, further promotion of the System in FY2015, with elaboration and simplification, is intended.

#### Future Challenges

The current Milestone Management System will be further elaborated into an effective and efficient tool to support staff members in planning for results, reviewing progress and generating concrete impacts to the target policy processes and stakeholders.

For the promotion of strategic planning:

- In-house capacity building for structured goal-setting is vital and relevant training/workshop will take place at the beginning of FY2015.
- An Area Review at the beginning of FY2015 will be best utilised for an exchange of lessons learnt and forward-looking discussions for effective impact generation between Area members, Top Management, PMO and other staff members concerned.
- Procedure for making any changes in originally-set milestones will be clarified to ensure dynamic management together with appropriate arrangement for progress review.

IT System for timely delivery and appropriate resource allocation, its usability, efficiency and usefulness will be improved:

- Simple and user-friendly interface will be developed over time. In the meantime, in-house training/workshops will take place.
- Improvements will be made to functions for encouraging appropriate staff time allocation and use, such as functions enabling users to effectively monitor staff time spent against that planned, with strong financial implications of staff time use.
- Inter-linkage between three fundamental management systems for efficient operations, namely the Milestone Management System, Time Management System and Financial Management System will be further elaborated and consolidated.
- Linkage with IGES Output Database will be looked into.

### **(1-2) Area Leader and Task Manager System**

The Area Leader and Task Manager System was newly introduced from the inception of the Sixth Phase with the aim of installing an enabling environment for more ambitious, dynamic, cross-area and swift operations. To this end, by and large, programme management was mandated to Area Leaders, while project management was mandated to Task Leaders.

#### Area Leader System

In the ISRP6, the role of Area Leader is stipulated as:

- *Act as senior researchers in their areas, supervising research in each respective area and overlooking strategic operations as a whole.*
- *Ascertain global trends in policy and research, plan and execute synthesis-type research from a mid- to long-term comprehensive perspective, and contribute to impact formation based on timely and effective outputs into relevant key policy processes.*
- *Provide necessary instruction on implementation of strategic research to task managers and will guide researchers.*

As discussed in the Area section, mainly in 'Review of Area/Task Activities', each Area made steady progress and created IGES niches in respective fields under the Area Leader System. Strategic planning for effective impact generation is gradually being introduced into staff members' mindset through respective Area Leader's leadership.

#### Future Challenges

Many Area Leaders still struggle with a large amount of day-to-day management that cannot be ignored and, in some cases, their over-involvement in microscopic operations. Situations differ from

Area to Area, while appropriate mandates given to and carried out by Task Managers, as well as enhanced support from relevant Senior Fellows, PMO and respective divisions of Secretariat may be essential.

### Task Manager System

Task Manager System was introduced:

- *To enable the flexible organisation of research teams comprised of members from different research areas.*
- *To eliminate the adverse effects of barriers between research areas, as well as to revitalise research activities by actively promoting young and highly capable team members to the position of Task Manager.*

Furthermore, the roles of Task Manager are stipulated as:

- *Taking responsibility for the planning and execution of tasks.*
- *Being in charge of implementation, including creation of reports and other outputs for related projects, budget management utilising IT, securing of required staff members, as well as coordination with clients.*
- *Carrying out work in close cooperation with relevant PMO staff in charge of strategic operations, under the instructions of Area Leaders as necessary.*

In order to support Task Managers carrying out these project management mandates, a couple of other systems were simultaneously introduced. These include: (i) Task-based Financial Management System; (ii) 60-20-20 Time Management System; and (iii) Average of 60% of staff time to be covered by external funding. The aforementioned Milestone Management System is also designed to support Task Managers in the planning and execution of tasks, as well as to support organisation of their project team with objective data management of staff time allocation.

#### (i) Task-based Financial Management System

The Task-based Financial Management System was introduced at the beginning of the FY2013. Each Task Manager is responsible for the financial management of his/her project portfolio with strong support from the Accounting Section in the Secretariat. A new online Budget Control System (BCS) has been installed and Task Managers have easy access to essential information. Through this system, Task Managers can keep track of expenditures, check remaining balances, and utilise other useful features such as online sign-off.

The budget for personnel costs will be linked to the Milestone Management System in FY2015, through which Task Managers can easily estimate the extent of human resources they can gather from in-house experts.

#### (ii) 60-20-20 Time Management System

The 60-20-20 Time Management System was introduced at the beginning of FY2013 aiming at enhanced cross-area collaboration and better mobilisation of in-house expertise for generating quality outputs, outcomes and impacts in an effective manner. Each staff member is encouraged to develop their work time portfolio with the average of: (a) 60% allocated to outputs/activities under the Area they belong; (b) 20 % allocated to outputs/activities under the Area other than they belong; and (c) 20% allocated to outputs/activities recognised under the All-IGES category.

The system was introduced as an incentive for staff members, as well as an opportunity, to allow staff member to work utilising their strong points as much as possible by committing themselves to a few projects for which they are selected by Task Managers.

(iii) Average of 60% of staff time to be covered by external funding

This obligation was also introduced at the beginning of FY2013 as an essential responsibility to be taken care of by each staff member. Each staff member is obliged to work on externally funded projects, on average, using up to 60% of their time. The remaining 40% is encouraged to be used in the development of value-added products and creation of meaningful impacts under the name of IGES.

With the combination of aforementioned Task Manager System and associated arrangements, a great deal of flexibility was observed in cross-area exchange of expertise, as well as in contributions to All-IGES products. Some examples include:

- Research: Low-carbon Technology Needs Assessment (TNA and CTCN)
- Research: Asia Environmental Impact Assessment Collaborative Research Project
- Research: Air Pollution Co-benefits; and Integrated Program on Better Air Quality
- Research and tool development: Japan 2050 Low Carbon Navigator
- Research and tool development: Community REDD+ Approach
- Capacity building: Asia Leadership Program on Sustainable Development and Climate Change
- Strategic outreach: Flagship project on SDGs
- Strategic outreach: Flagship project on Climate Regime
- Strategic networking/outreach: LCS-RNet and LoCARNet activities
- Strategic networking/outreach: ISAP 2014

However, despite the successful cases observed as above, some issues still remain. Task Managers, as well as Area Leaders, often face difficulties in cross-area team organisation for various reasons. Typical cases are found in projects with insufficient funding for the personnel budget, those that require more operational activities than research activities, and those that emerged in the middle of the fiscal year, and so on. It is also commonly noted that once staff members have fulfilled their fundraising requirement – the average of 60% of staff time to be covered by external funding, they tend to have less interest in being involved in the operations carried out by other groups.

#### Future Challenges

The current system should be further elaborated and operationalised to provide the right incentives for each staff member to pursue the benefits of cross-area collaboration. Such measures may include those outlined below:

- Firstly, there should be enhanced understanding on the objectives of 60-20-20 System among staff members.
- Secondly, measures to facilitate information-sharing and match-making of in-house needs and seeds, at the beginning of each fiscal year, as well as in the middle of the fiscal year, should be introduced. To this end, newly introduced online Milestone Management System should be further elaborated, simplified for easy-to-use, so that it could be better utilised by all staff. Support from PMO, together with the Human Resources Management Section of the Secretariat, also needs to be strengthened.

- Thirdly, lessons should be learnt through Area and individual performance review processes. Opportunities created for each staff member through the 60-20-20 System, as well as how effectively such opportunities were designed by managers for generating quality outputs, outcomes and impacts should be carefully examined.

Other than above, it should be also noted that talent and skills required for task management are different from those for being a good and productive researcher. Some staff members may be talented on both counts, but this is not always the case. The current promotion system for research staff does not provide any options except a single path from Researcher to Task Manager position. Ever-increasing needs for strategic operations have led to the creation of the Programme Officer position in the Research division. Perhaps it may be worth considering the possibility of parallel or multiple tracks for IGES staff career path, fully taking into account the unique operations of IGES and the different skill sets for respective operations.

### **(1-3) Investment Facilities**

With the aim of mobilising necessary resources, both human and financial, for emerging research and operational needs, the PMO is equipped with the Strategic Research Fund and Strategic Operation Fund. The former has a long-standing history since the Fifth Phase, while the latter was established in FY2014.

The Strategic Research Fund has been awarded to the winners of an in-house competition for bottom-up research proposals submitted at the beginning of each fiscal year. One of the recent examples is an initial investment in the Japan 2050 Low Carbon Navigator development in FY2013, which was followed by larger external funding in FY2014 resulting in the successful development of the tool. The latter has been allocated to such operations as preparation of IGES South-Asia Regional Desk to be hosted by TERI in India.

#### Future Challenges

It is important to secure this kind of budget line for enabling swift investment in emerging opportunities. At the same time, it is essential to mobilise such facilities effectively and efficiently. Issues to be address include, but are not limited to:

- The total volume of investment facilities, taking into account the IGES's operation level and financial situation.
- Balance of programmed investment for multiple years and ad-hoc type investment for a single year.
- Balance of investment in different categories, such as research, tool development and strategic operation.
- Timing(s) of the call for bottom-up research proposals. The current once-a-year call cannot address some of the opportunities in timely manner.
- Methodologies to monitor and quantify the return of investment.

### **(1-4) Overall future challenges**

Based on the experiences and lessons learnt in FY2013 and FY2014, together with future challenges mentioned in the above sections, the following challenges will be addressed in the second half of the Sixth Phase.

- The 'IGES Top Achievements Awards' will continue as an incentive mechanism to encourage staff efforts in impact generation.

- A reporting mechanism for impacts created by each Area/Task will be improved, so that concrete impacts can be quickly recognised, outreached and success factors can be widely shared among staff members.
- The use of objective data from the three fundamental management systems, namely the Milestone Management System, Time Management System and Financial Management System for Area Review and individual performance review processes will be seriously considered.

## **(2) Flagship Initiatives**

### Progress made

IGES's flagship initiative has been producing a series of IGES White Papers on major issues in Asia, published once every two years. The Flagship operation in the ISRP6 originally strove to develop strategic publications produced through a periodic review of overall policy development in Asia for each major issue which could then be disseminated to stakeholders such as policymakers in Asia. Periodic review of the state of the environment in each country was also mentioned in the ISRP6 as an example of a flagship product, with the expectation that this would result in a few databases, leading to the development of an IGES knowledge management system in the mid-term. During the first half of ISRP6, the flagship operation focused more on showcasing IGES' expertise, to improve the Institute's visibility and branding, and to influence selected policy processes, rather than just aiming at publication development.

Flagship initiatives typically address cross-cutting topics of strategic significance and involve researchers from several areas of the Institute. IGES currently has three flagship initiatives running: one analysing regional integration in Asia from a sustainable development perspective, one on the future global climate regime, and one on the sustainable development goals with a particular focus on means of implementation and governance.

The initiative on regional integration started early in the Sixth Phase and will publish its final report in spring 2015, which is almost one year behind the original schedule. But it is considered still timely, given that the ASEAN Community will be launched at the end of this year and that there are other integration initiatives currently being negotiated or discussed. A pre-launch event was held at ISAP 2014, where some of the key messages were presented and a draft executive summary was distributed. Additional outreach activities have also been carried out, including a presentation at an OECD regional meeting on trade and environment, and flyers in Japanese and English, which have been distributed at relevant policy meetings. This initiative continues the tradition of IGES' white paper series and the production process has been similar to that of earlier reports in the series.

The other two on-going flagship initiatives started in 2014 and both of them will launch synthesis reports at ISAP in July 2015, where climate change and the sustainable development goals (SDGs) are expected to be the main themes. The key international policy events for these two initiatives are the climate COP21 in Paris in December 2015 and the Summit on the post-2015 development agenda in New York in September the same year. The flagship team in PMO is co-leading these two initiatives together with the area leaders concerned. In this role the flagship team supports the planning, publishing and outreach.

### Future challenges

The flagship team was newly established at the beginning of the Sixth Phase and it has taken some time to develop effective ways of initiating and running cross-area projects. Based on the experiences gained in doing this, IGES' approach to flagship initiatives has evolved over time. It is already possible to distinguish three generations of such initiatives:

The initiative on regional integration represents the first generation where the research areas were requested to contribute with report chapters around a common theme. The assumption was that most areas would be able to utilise work they had already done or were currently doing so that additional work could be limited. The overall theme was selected with this criterion in mind. However, experience shows that in many cases it was challenging for the areas to develop strong chapters with clear messages that were well aligned with the report's overall storyline. Also in those cases where the areas had run projects related with the overall theme of the flagship initiative, there was often a need for considerable extra analysis and reframing, making it challenging to meet the expected quality standards and to comply with deadlines.

The two flagship initiatives launched in 2014, on the future climate regime and the SDGs, were initiated in a different way. They were both based on on-going work handled mainly by one area but also involving staff from other areas. They represent the second generation of IGES' flagship initiatives. The expectation is that by being identified as flagship initiatives these two work streams will more effectively engage expertise from several areas of the institute, and that they will be able to produce better quality output and to be more active in outreach than would have been the case otherwise. Since these second generation initiatives are anchored in projects with substantial external funding it has been found easier to mobilise sufficient human resources, which is needed for good quality and timely delivery. However, since the initiatives bring together projects that had been designed individually, without much coordination or complementarity in mind, and that are funded from different sources, it is challenging to create synergies between projects.

Based on the experiences made so far, discussions are now on-going about what future flagship initiatives at IGES – the third generation of such initiatives – should look like. It is still early to provide details but efforts will be made to develop flagship initiatives that are designed as such from the beginning, that consist of activities that are complementary and mutually supportive, that have multi-year funding, and well thought-out strategies for stakeholder engagement and influence. This kind of approach could be similar to that promoted by WRI as the “Signature Initiative”. This could become an important challenge for IGES in the future.

### **(3) Outreach**

#### Progress made

The Outreach operation aims to raise the visibility of IGES research outputs and improve IGES' reliability as an international research institute through effective and timely dissemination on IGES research and activities to target appropriate audience. During the first half of ISRP6, Outreach activities as a whole were conducted through the creation of PR materials, website management, seminars and symposiums including the support of the events conducted by the Research areas, and through media relations.

Outreach created a brochure for the Sixth Phase, annual reports and newsletters as some basic PR materials for IGES. E-mail news in the form of “E-alert” was distributed to a wider range of stakeholders, including media, academics and private sectors. The number of readers is about 5,000. Outreach holds several seminars on climate issues targeted at Japanese stakeholders. Among others, the “IGES COP seminar” is conducted every year about one or two weeks after the UNFCCC-COP and this has become a flagship event of IGES, which was highly appreciated by participating Japanese stakeholders as a timely reporting on the climate negotiations. The logistics and PR support for events conducted by the Research areas have been strengthened for effective and efficient event operation.

The main window for IGES’s PR is the website. The new website was opened in June 2013 and was intended to enhance user accessibility. For example, users can access the latest information on IGES research activities from the new top page that has a simple and clear design. In FY2014, an attempt at search engine optimisation (SEO) was started to navigate potential readers to information provided by the IGES website. An increase in the number of visitors to our website and in publication downloads in the Fifth Phase indicated that IGES’s outreach power is being strengthened, even though the number of publication downloads has shown a decreasing trend in the Sixth Phase.

As mentioned in the overall performance of IGES in the first half of the ISRP6 section, media coverage on IGES outputs and activities has increased in recent years. One example of this is collaboration with GE-Biz team, with proactive outreach to media bringing a good result.

The collaboration with the Flagship Initiative on SDGs and Climate has been strengthened, aiming to generate more impacts to stakeholders. A website for each flagship project has been established and a new web article series “Climate Update” was begun targeting Japanese stakeholders interested in the climate issues.

#### Future challenges

Outreach activities have been strengthened in the first half of ISRP6 and are showing positive signs of improvement. Considering the phase-out of the subsidy from Kanagawa Prefecture on PR activities, outreach activities need to be more strategic and efficient. Outreach for the rest of ISRP6 should be further strengthened in consideration of the following points.

- Improving the website further, based on more solid analysis of access and SEO
- Improving contents and design of “E-alert” to get proper attention from stakeholders
- Strengthening PR support to the on-going Flagship Initiative and other research projects expecting specific impact generation
- Strengthening media relations in Japan through effective and timely press releases. For this purpose, interaction with research areas should be strengthened.
- Exploring ways to develop the delivering capacity of IGES to international media to strengthen outreach outside of Japan.
- Improving outreach capacity of IGES by working with IISD-ENB etc.
- Finalising a draft communication policy and taking necessary in-house action for sound implementation of the policy

#### **(4) Networking**

##### Progress made

The network operation aims at relationship-building with partner institutions and participation in key forums. Effective coordination and development of multiple international and regional networking operations in which IGES research projects are involved and the effective operation of the International Forum for Sustainable Asia and the Pacific (ISAP) are specific activities intended to be promoted by the ISRP6.

There are some positive outcomes in networking activities over the past two years. For example, close collaboration with the UNFCCC Secretariat has given IGES the opportunity to host the UNFCCC CDM Regional Collaboration Centre (RCC) in Bangkok that will strengthen capacity building on CDM which IGES has promoted. By the same token, close collaboration with the United Nations Environment Programme developed into an agreement to set up another collaborating centre for UNEP's International Environment Technology Center (IETC) located in Osaka, Japan. The networking efforts made under the Sustainable Consumption and Production Area resulted in the launch of the Global Research Forum on Sustainable Consumption and Production.

LoCARNet, as an important regional forum and vehicle to create research and outreach opportunities for IGES, will be further enhanced. It will expand its scope and cover both mitigation and adaptation issues. LCS-RNet is planning to produce recommendations for COP21 as an output of the network and IGES plays an important role as the Secretariat.

Networking with other organisations has been strengthened, and several formal agreements on general collaboration have been concluded or been renewed in FY2013 and FY2014, including agreements with the Ministry of Environment Conservation and Forest of Myanmar, the City of Kawasaki, City of Yokohama, and the United Nations Environment Programme. The Indonesia desk of IGES has strengthened its capacity to support IGES activities and network building in that country. To strengthen the network capacity of IGES in the region, an IGES desk for South Asia will be launched in India in February 2015, which is located within TERI.

##### Future Challenges

The last two years saw substantive development of networking in a broader sense. It is important to recognise that these positive developments were the result of IGES's substantial efforts to build trust with important partners. But at the same time, these new networking developments are the basis for generating more substantial impacts. Thus, while similar efforts will continue to strengthen networking and partnering with key partners, intensive efforts should be made by the divisions concerned to substantiate networking.

#### **(5) Quality Management**

##### Progress made

In the Sixth Phase, the Quality Management Function in the PMO was strengthened with the addition of a Senior Coordinator in addition to the part time Senior Advisor. The basic direction is to strengthen quality at all stages of the research and writing process ("clean production"), starting with

the planning stage, rather than simply checking the publication after it has already been written (“end-of-pipe” checking), although end-stage review would also be strengthened.

In order to enhance quality during the planning and writing process, several measures were taken including implementation of new policies, clarification of quality criteria, explanatory documents, and training sessions. Some researchers, but not all, consulted with Quality Management during the planning and writing phases.

Reviews and planning/writing consultations were enhanced by the participation of both the Senior Advisor and Senior Coordinator in most cases. Additional internal reviews as well as external reviews were conducted as much as possible. These measures helped to enhance the quality and fairness of the reviews by considering comments from various perspectives.

Special attention was placed on priority outputs such as the White Paper, Flagship outputs, and ISAP posters in terms of both consultation during planning and writing as well as final reviews.

For certain competitive research funding proposals to Japan’s Ministry of Environment and Ministry of Education, Quality Management, in cooperation with PMO/Fundraising, also developed a document with strategy suggestions, and provided advice and consultation to researchers applying to them. However, Quality Management was not involved in other types of fundraising, particularly for commissioned work.

The External Review of the Fifth Phase was also successfully coordinated by Quality Management. The overall review was positive and produced useful and relevant suggestions for improvement.

#### Future challenges

Although the strengthened quality management system has made progress, especially on priority publications, timely reviews and comments, and improving basic procedures, still many issues remain to be addressed. There are still time and capacity limitations to producing quality of their outputs, and there are some difficulties in producing timely publications in various forms. Many publications, especially discussion papers and commissioned reports, are managed exclusively within Areas and are not reviewed by the PMO (in order to facilitate quicker publication), so there is some uncertainty about the level of quality of these output types. Clean production methods have not been fully adopted throughout the institute, especially in the early project planning stages and for commissioned work, and this leads to delays due to the need for additional revisions. Finally, there should be greater linkage between Quality Management and impact generation. Future fundraising success will also depend heavily on strengthening the quality of outputs.

Thus, following measures are proposed.

First, a high priority should be placed on internal capacity building of researchers. IGES researchers come from a wide variety of backgrounds and experiences and are not always accustomed to policy research. More training sessions could be organised to address strategies for adapting writing to be clearer and more persuasive policy-related audiences, and to enhance overall writing efficiency and productivity.

Second, Quality Management may need to be more closely involved earlier in planning and milestone setting processes to more effectively implement clean production. A simple tracking system for the production of publications could be considered to facilitate this. This is expected to enhance efficiency as well as impact generation.

Third, influence generation can be enhanced by expanded coordination with Outreach, Networking, Capacity Development, and Knowledge Management. These are still not linked closely enough with outputs.

Fourth, efforts will be made to expand the use of professional editing to help improve both the quality and timeliness of outputs.

#### **(6) Capacity Development (for external stakeholders)**

Capacity development operations aim at enhancing IGES impact generation and providing strategic support, training and facilitation for target external stakeholders. These operations utilise IGES strategic research, expertise and outputs for the provision of substantive, practice-based solutions, as well as mobilising external resources available to this end. CD operations focus on four progressive steps of action:

1. Coordination of internal skills, tools, and methods for delivery of CD operations
2. Enhancement of impact generation and value-added application of IGES expertise
3. Provision of targeted leadership and CD operations through the identification of priority needs and actors
4. Facilitation of substantive, practice-based solutions.

During the first half of ISRP6, CD operations have focused extensively on developing our profile as a capacity facilitator/trainer and establishing partnership for achieving good opportunities for CD provision. In FY2014 and FY2015, IGES has worked closely with ADB, JICA and Thailand Greenhouse Gas Management Organization (TGO) to deliver capacity development trainings to target stakeholders, through which IGES has played an active role in developing training curriculums, course materials and training delivery/facilitation. CD operations have also undertaken efforts to strengthen IGES's production of e-learning products and established partnerships with external organisations to better meet target stakeholders' needs and priorities through innovative approaches.

#### Future challenges

During the second half of ISRP6, the above action steps and approaches will remain in place. More effort though will be placed on steps 1 and 2 for improved coordination of IGES expertise and general improvement of CD approaches and techniques utilised in these operations. This will aim to develop preferred delivery methods across all CD operations while also ensuring better linkages to specialised expertise across the institute.

## **(7) Knowledge Management**

Knowledge Management operations aim to provide: 1) Proactive facilitation for enabling knowledge creation, accumulation, retrieval and utilisation for improving overall performance of IGES; and 2) Enhanced coordination and coherence between various IGES databases and other types of knowledge management tools open to the public. The KM strategy addresses four main incremental action areas:

1. Accumulation of external knowledge and IGES systems for knowledge production
2. Institutional knowledge accumulation and sharing
3. Coordination and coherence of publicly-accessible knowledge, and
4. Systematic delivery of IGES knowledge and expertise.

During the first half of ISRP6, KM operations have focused on the improvement of internal knowledge management systems. The introduction of new software supports better access to electronic references and journal articles, better accumulation and organisation of these resources, improved citation and referencing functions, and enhanced sharing of resources and information among staff. The provision of training has also supported better use of these resources. Improvements to the structure and management of IGES publication database have been initiated, and an assessment of long-term knowledge management needs was conducted in the preparation of a multi-year operational plan for further improvements. A Staff Knowledge/Expertise Database was established to create better identification of the various expertise help across the institute and for linking appropriate staff to new opportunities. While major KM operations have focused on improvement for internal knowledge management, multiple studies and initiatives also have occurred to develop an appropriate strategy for strengthening the overall delivery of IGES knowledge and expertise. These initiatives include improvement of IGES's externally managed databases, integration of databases under a common good practice collection, and enhanced community of practice functions for network websites.

### Future challenges

KM improvements will continue following the multi-year operational plan during the second half of ISRP6 supported by increased human resource expertise, but the major focus of KM operations will turn its focus towards strengthening the dissemination of IGES knowledge and expertise to external stakeholders in innovative and solutions-oriented manners. In FY2015, IGES will join the JSTOR special "Sustainability" collection for improved dissemination of publications. KM will also work to improve analytical tools for evaluating the impact of IGES publications.

## **(8) Capacity Building (internal)**

Capacity building of IGES staff members aims at improving overall performance of IGES through creating practical opportunities for enhancing staff capacity in research, as well as in networking and strategic operations. The Capacity Building Strategy focuses on internal operations of IGES and will provide a framework for institutional improvements linked to research performance, production of value-added publications, and delivery of products aimed at transformative change. This strategy distinguished necessary capacities at the individual, area and institutional level, and as such it sets the following goals:

1. Staff Capacity: a) Research Capacity, b) Communication Capacity, c) Management Capacity, d) Language and Computer Skills

2. Area Capacity: a) Needed expertise to produce innovative and transformative research, b) Ability to impact on important policy processes and negotiations
3. Institutional Capacity: a) Progressive development of IGES knowledge, products and tools, b) Production of synthesis and nexus research, c) Profile IGES as change agent and proponent of sustainability paradigm
4. Develop, coordinate and systematise mechanisms for internal capacity building.

The first half of ISRP6 saw a strong focus on improving the management capacity of IGES staff which was deemed essential to respond to the establishment of the Task Manager position that delineated more management responsibilities across a wider number of staff. In both FY2013 and FY2014, a series of in-house training seminars on management capacities was organised. This training also responded to an internal capacity needs assessment that was conducted. Staff exchange and external capacity building opportunities were identified for a limited number of young staff. Improved mechanisms for staff knowledge-sharing have promoted better engagement and understanding among researchers. A review of IGES internship programme was conducted, and necessary improvements to the procedures and guidelines were introduced.

#### Future challenges

During the second half of ISRP6, staff capacity training will focus more on research and communication capacities with the aim to improve staff ability to bridge the science-policy interface with validated and justified policy recommendations. Further efforts such as the “transition research study group” conducted in FY2013 will continue to help strengthen IGES’s approaches for innovative and transformative research.

## 4-2 Secretariat

To ensure that IGES in its Sixth Phase is more accountable as an organisation in the public interest and that support is given to sustainable strategic research activities, a more effective and efficient system of governance needs to be put in place. Under the three pillars of Human Resources, Accounting and General Affairs, the Secretariat has worked jointly with the PMO to manage human resources and funding, and to support developing a base for organisational management with a perspective of “management” beyond conventional “administration”.

As a result, the financial status has certainly improved and the system for employing staff members has strengthened. However, financial operations are not able to be clearly predicted in the medium and long term, and there are still issues remaining with the personnel system in that it still cannot respond swiftly and smoothly to changing needs. Also there has been insufficient progress in the efficiency of office administration utilising IT, resulting in a large amount of staff time being spent on handling settlement documents. Furthermore, the budget and the staff volume allotted to management have remained at the same level these past few years, so it is vital to try to improve efficiency of office management from now on.

### Administrative costs

(Unit: Thousand yen)

FY2013 Result	FY2014 Prediction
558,761	633,437

Costs include: Office rent (Headquarters, Tokyo office, Bangkok Regional Centre), Facility maintenance costs (including IT-related costs), Consultant fees for Law/Audit/Human resources, Personnel recruitment costs, BoD/BoT meeting costs, Welfare expenses, Insurance expenses, Taxes and dues etc.

### (1) Human Resources Management

In the Sixth Phase, a Human Resources Management section was newly set up in the Secretariat to maximise performance across the whole Institute by securing and placement of appropriate personnel. HR works to ensure hiring of staff suitable for IGES, to improve their employment conditions, and to raise their motivation.

#### *Appropriate positions and employment conditions*

Setting up an HR section ensures consistent personnel management for the whole organisation. Old personnel-related regulations were reviewed so that a unified response can be given to IGES HQ, satellite offices, and for other accounting business. In addition, in order to improve the efficiency of office administration, the position of Programme Officer was set up in the Research Department in the latter half of FY2014. It is hoped that this will work as a new career path for administrative employees, to improve the motivation for administrative staff and make use of their abilities, as well as contribute to strengthening capacity in the Research Department. However, it is important to strengthen overall coordination to ensure that the newly established position of Programme Officer does not lead to a net increase in staff members in principle.

#### *A more effective time management system*

As an application tool for time management, a working hours management system was created (in

FY2013) using an online Business Control System (BCS) . This was made operational on a trial basis in the latter half of FY2014. Through BCS, it has become easier to check employees' work hours, and cover labour management such as controlling long working hours. However, the IGES working hours management system is not functioning properly as a useful tool for effective use of staff work hours or as a means to share and divide work between those staff who have time to spare and those who don't. There is a need to clarify its purpose and make further improvements so that it can be of use to both management and to individual staff members.

#### ***Appropriate placement, employment conditions and management of personnel***

Staff recruitment was properly conducted based on the needs of each Research Area of IGES and backed by funds. Placements were made having gone through a formal hiring process. However, Areas that have less work were not monitored strictly, failing to take appropriate actions in human resources management. In terms of general management of staff numbers, there is still room for improvement. Taking into consideration budget acquisition and staff performance review, it is required to create an integrated HR management system for IGES as a whole.

Making use of the knowledge of experts such as HR consultants and industrial physicians, practical measures and tools for HR and labour management were developed, such as introducing phased approaches to improve staff performance and the creation of guidelines for returning to the workplace for those staff who took leave of absence for injury or illness. In addition, to prevent HR issues becoming serious, Managers' Training was carried out (in FY2013 and FY2014) aiming to improve managers awareness and ability in dealing with HR and labour management. However, the situation has not been resolved so easily, and further actions need to be taken for substantial improvement.

#### ***Appropriate and effective system for performance-based salary***

The complicated performance evaluation rules were revised to improve staff understanding of the standards for evaluation and the assessment process. In addition, other accounting business was positioned clearly under the revised rules. In this way, it was possible to implement a unified performance evaluation for the whole Institute. The actual evaluation process depends greatly on how the assumed procedures and system work, and from now, it will be necessary to continue with efforts to improve the evaluation system to ensure that it is as effective and efficient as possible.

#### **Future challenges and necessary actions**

First of all, it is necessary at the earliest opportunity to set up a personnel management system that is consistent overall, taking into consideration of Area-level fund raising status and staff performance.

For hiring staff members, timely recruitment is sought to better meet the needs of the areas/sections, by making use of the newly established Programme Officer position, in addition to Research Staff and Administrative Staff. Further, working closely with the Accounting Section, time management system and evaluation standards etc. will be improved to timely provide necessary information for managerial decisions well beforehand.

On the other hand, for labour management, overall work efficiency will be improved by encouraging honest exchange of opinion among areas/sections, striving to reduce wasteful procedures and work as much as possible. Thus it is hoped that this will alleviate the need for long working hours. Moreover, initiatives such as working from home will be taken into consideration for those engaged in child-rearing and elderly care. By early establishment of a salary system based on work content

and actual performance, and by devising a visible career path, all staff will be able to carry out their work with enthusiasm.

Bearing in mind these issues, preparations are underway to reform the HR policy and system in the run up to the Seventh Phase. Specifically, one extremely important issue is to develop in-house rules to respond to revisions to the Labour Contract Act that came into force in 2013.

## **(2) Accounting Section**

The Accounting Section aims to implement financial management contributing to sustainable operations, and works on effective budget execution management, on sound and strategic fund management, and on strengthening financial governance.

### ***Effective budget execution and management under the Task Manager (TM) system***

With the introduction of the TM system, TMs are now the ones who take responsibility for the budget execution for each task, ensuring transparency and brevity for the approval and execution process. Also, the Business Control System (BCS) was introduced to support management practices for each project. The Accounting Section also developed a set of guidelines for the execution of external funds and promoted staff to make appropriate budgets that more correctly reflect actual costs (including personnel costs) incurred within IGES.

As accounting work required by funding agencies has become even stricter, it is necessary to deal with this in an effective manner. It is also required to simplify and clarify the lines of responsibility for accounting matters and to avoid duplicate work being carried out by the Accounting Section and each Area. The BCS system needs to be radically improved and developed into a practical system interlocking budget execution with estimations and adjustments. Guidance also needs to be carried out for TMs and Programme Officers in collaboration with HR Section and PMO. It is now necessary to formulate a simple yet robust system with a fully standardised form by maximum use of BCS.

### ***Maintaining a sound financial status***

IGES entered its Sixth Phase with a deficit left from the final year of the Fifth Phase, and focused on restoring the Institute to financial health in the first half of the phase. In FY2013, comprehensive cost reduction measures were introduced and were successful in returning IGES into the black. In addition, to ensure a better understanding of IGES financial situation as a whole, financial performance targets were set for each Area from FY2014, and the status was regularly monitored through consultations between the PMO and Accounting Section. Based on various factors in addition to funding acquisition, costs such as personnel costs and operating costs, number of working days covered by external funds, and internal staffing between Areas, the Accounting Section gained a multilateral understanding of the financial performance for each Area, and implemented actions required such as cost reduction, effective use of personnel across Areas and recruiting. As a result, it is expected that the Institute will have remained in sound financial health for FY2014.

It is vital that this Area level management of financial performance should be carried out in a more timely and effective manner.

### ***Securing an appropriate budget as an investment for the future***

In FY2014, investment expenses were budgeted for (about 3% of revenue) and under these, a strategic operations fund was set up in addition to the strategic research fund. This provided a system

for timely implementation of strategic investments. Through there are reserves from this type of investment budget, the expenditure is to be effectively spent for establishing the necessary foundation for IGES future development.

These are investments facilities, so it is important to carry out proper regular assessment to check the effects of each investment, and then to identify any necessary follow-up actions. Based on the results of this assessment, we then need to clarify the process to mainstream the investment expenses into the regular budget. There is also a need to formulate regulations for effective operations of these investment facilities.

### ***Review of expenditure***

In order to improve the long-term financial status of IGES, it is extremely important to conduct a review of expenditure. IGES has a huge amount of outsourcing which needs to be in-sourced so as to make use of acquired funds in a more useful way. To do this, the guidelines for implementation of external funds should be reinforced and if necessary, changes should be made to the IGES organisation and system.

### ***Strengthening financial governance***

In FY2014, IGES Finance Committee (members: Chair of the Board, President and Secretary General) was set up, to ensure transparency in decision-making on important financial and accounting issues including expenditure decisions from a mid-to-long term perspective, such as the relocation and expansion of the Tokyo office, and the purchase of long-term national bonds, which contribute to the strengthening of IGES overall governance.

### **Future challenges and necessary actions**

In the latter half of the Sixth Phase, Area-level financial management will be further improved and continued to be implemented. At the Task level, one on-going challenge is how to support more effective project budget management, and BCS will be further improved. Furthermore, capabilities for accounting related administrative operations will be strengthen in research areas by providing guidance as well as allocating accounting expert assistants so as to make institutional accounting operations more efficient. In addition, aiming for more sustainable operations, a specified reserve fund will be set up for future projects and expenditure following the accounting standards for public-interest corporations,.

### **(3) General Affairs**

The General Affairs section deals with important issues related to appropriate governance of IGES as a whole including compliance with the IGES Articles of Incorporation and related rules for public-interest corporations, convening of meetings for the Boards of Directors and Trustees, and contracts with external organisations. The section also works to develop an efficient business environment that contribute to raising the performance of strategic research activities.

### ***Maintenance and strengthening of overall IGES governance***

In order to maintain the proper governance as a public-interest corporation, a comprehensive review is being carried out for the regulations and detailed rules; and revised versions are being drafted so as to be effective from 1 April 2015.

At the same time, as part of in-house compliance, regulations to prevent sexual harassment and workplace bullying have been brought in, and consultation services have been set up with

cooperation from external experts. A system has been established to provide prompt and precise advice on various issues from experts (lawyer, licensed tax accountant, social insurance consultant, industrial physician), and other issues that suddenly arise can also be dealt with reliably.

#### ***Development of a prompt and efficient business environment***

In 2013, full scale operation of BCS was begun enabling the visual monitoring of the approval process and ensuring rapid progress to the final approval. This BCS system was updated in the latter half of FY2014 so that approval could be given from the satellite offices and externally (when on missions, etc.). A system for teleconferencing via the Internet (WebEX and Web cameras) was newly introduced, resulting in an increase in on-line conferences, including the Board of Directors/Trustees meetings, which contribute to more convenience for participants and a reduction in travel expenses.

#### ***Contributing to improving IGES environmental performance***

Through EcoAction21 activities, the General Affairs section has worked to raise staff awareness of IGES's environmental performance. Outside the workplace itself, we have conducted regular annual events contributing to the local community, as well as lectures for local environmental NPOs and environmental training for newly hired schoolteachers, and in this way, efforts have been diversified to reach out to local stakeholders.

#### **Future challenges and necessary actions**

One important challenge accompanying the increase in external funding is how to deal appropriately as a public-interest corporation with the growing number of legal matters that emerge with external organisations both in Japan and overseas. To deal with this, institutional expertise on legal affairs will be strengthened by appointing a staff member in General Affairs, to further reinforce our links with lawyers and judicial scriveners, and to establish a system for checking contracts and submitted documents.

By linking with the Accounting Section, HR section and PMO and clarifying each responsibility, BCS should be improved so as to contribute to more efficient and prompt working practices. Likewise, there will be a drastic simplification of the internal approval process, and the current paper-based system will be fully computerised.

#### **(4) Overall Secretariat**

In the latter half of the Sixth Phase, each Section will have its own targets and will achieve them in a step-by-step manner. Based on these results, the Secretariat will be required to work even more as a team incorporating HR, Accounting and General Affairs, working towards the improvement of IGES-wide performance. In particular, as the financial contributions from national and local governments are decreasing year by year, the positioning of external funding has become more vital. Efforts to accelerate improvements to the BCS system for more expeditious management of the implementation of those external funds should be made in full linkage among sections coordinating with Research areas. Support for legal aspects also should be reinforced.

On other matters, focus will be put on personnel management to secure motivated staff who can work positively to achieve good performance. It is also necessary to strengthen administrative ability in the English language in order to deal with office settlements bilingually.