# The Business Report for FY2014 Institute for Global Environmental Strategies

## I. Overview

Under the Integrative Strategic Research Programme for the Sixth Phase (ISRP6), which started from April 2013, IGES has implemented **strategic research** and **strategic operations**. Both strategic research and strategic operations were applied in a way that is flexible enough to cover a broad policy agenda for transition to sustainable society in the Asia-Pacific region, and to maximise effective impacts, aiming to be an Agent of Change.

**Strategic research** consolidates seven research areas under three pillars of sustainable development, namely "Environmental", "Economic" and "Social." The research areas of "Climate and Energy", "Sustainable Consumption and Production" and "Natural Resources and Ecosystem Services" are under the environmental pillar, "Green Growth and Green Economy" and "Business and Environment" are under the economic pillar; and "Integrated Policies for Sustainable Development" and "Sustainable Cities" are under the social pillar. IGES carries out its strategic research at the Headquarters in Hayama, the Kansai Research Centre, the Kitakyushu Urban Centre, the Regional Centre in Bangkok, Thailand and the Beijing Office in China.

**Strategic operations** were led by the Programme Management Office (PMO) in order to produce timely and effective outputs targeting key policy processes with strategic operational functions including Knowledge Management, Capacity Development, Quality Management of Research Outputs, Outreach, Networking and External Funding.

## 1. Achievements

## **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, specific cases of impacts created by IGES have significantly increased.

Impacts have been generated in several different ways: (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 experience on impact generation, much deeper thinking is likely to emerge regarding effective and sustainable impact generation.

For each specific impact, substantial efforts were made by staff members. For example, intensive lobbying and coordination with political parties, media, and relevant ministries 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 Centre of United Nations Environment Programme (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.

All Areas and Tasks conducted diverse strategic research activities and operations towards impact generation along with Milestone Management, and delivered successful cases as cited below. (See further details in the Chapter II Strategic Research.)

Specific impact cases are indicated below for 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 the 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 provoked a national level discussion and led to its adoption in the FY2015 package.

#### • IGES taking the lead in UN Decade Programme – SCP 10YFP:

Long-standing efforts by IGES resulted in an invitation for the institute to play the leading role in guiding the Programme of Sustainable Lifestyle and Education (SLE) component of SCP 10YFP, and the appointment of the IGES President as a board member of SCP 10YFP on behalf of the Government of Japan.

#### • IGES's recommendations reflected in the updated EPR Policy by OECD:

Extended Producer Responsibility (EPR) policy has been promoted by OECD with the 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.

#### (Through Provision of Guidelines)

#### • Mainstreaming of Community-based Forest Management: Community-based Forest Management has been promoted in the region through the wide use by practitioners and training communities of IGES tools and guidelines, such as the 'Training Manual on Community-based Forest Biomass Monitoring'

# • National forest governance standard for Nepal:

IGES signed 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.

#### (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), academia, NGOs, as well as university students and related associations. The Navigator is designed as an easy-for-communication simulation tool supporting policy discussions/dialogues and has been subject to substantial media coverage/articles since its launch in the summer of 2014.

#### • 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-making, through which a 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 with IGES as the part of platform along with the City of Yokohama, city network and private sectors, serving to address the 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.

#### • Establishment of IPBES TSU in Japan within IGES:

The Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) selected Japan to be the host for its Technical Support Unit (TSU). It is located in the IGES Tokyo Office. TSU will provide scientific and technical support of deliverables, as well as logistical and operational support.

#### (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 an integrated approach to mainstream adaptation-mitigation concerns into local development planning.
- JICA-SIDBI Adopted Low-Carbon Technologies Commended by IGES: Japan International Cooperation Agency (JICA) and Small Industries Development Bank of India (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
- China-Japan Inter-City Cooperation for Air Quality Improvement: Ten local governments in Japan started communication and cooperation with respective Chinese counterpart cities on air quality management, with substantive support from IGES.

## **Outputs Delivery**

## (i) 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 total number of publications for FY2014 has surpassed that of the previous year.

In FY2014, as the second year of the Sixth Phase, the total number of publications was 340 (see Figure 1), about 30 publications more than the previous year. This corresponds with general trend observed in each of the previous phases.



Figure 1: IGES Publications (FY2007-FY2014)

## (ii) Quality Outputs

IGES distinguishes "quality" outputs which undergo more extensive review procedures compared to others. These include some IGES publications (policy briefs, policy reports, research reports), book chapters contributed to major publications made by international organisations and IGES partners, 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 almost satisfied in FY2014. However, efforts have to be intensified further to produce more policy papers, so that impact could be more systematically created.

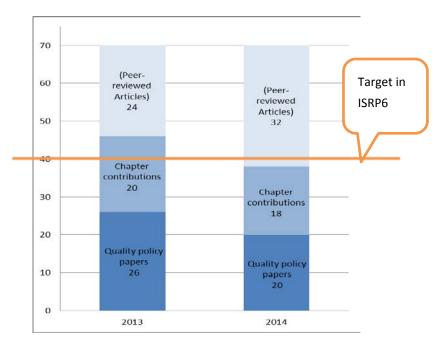


Figure 2: Numbers of 'Quality Papers' (FY2013-FY2014)

- \* '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 substantial increase in the number of peer-reviewed journal articles. This may be attributable to the fact that research results made in the previous phase have been submitted for publication, and finally accepted and been published as journal papers in FY2014.

## **Recognition and Appreciation of IGES**

In order to generate impacts, it is important to enhance recognition and appreciation of IGES and its achievements through effective outreach activities by utilising the above mentioned outputs targeting appropriate stakeholders. In FY2014, indicators listed below suggest that such recognition and appreciation continued to be developed.

## (i) International Recognition of IGES

International recognition of IGES is quite an important indicator for IGES to truly become an "Agent of Change". As attention paid to IGES products increases, 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<sup>th</sup> in the listing of 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<sup>th</sup> 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.

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

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

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

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

#### (ii) Media Coverage

In FY2014, IGES activities received more attention from the Japanese media, compared with the previous two years as shown in Table 2. 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 in the PMO. As the result, Japan Climate Leaders' Partnership (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.

	FY2012	FY2013	FY2014			
In Japanese	90	104	117			
In other languages	12	22	34			
Total	102	126	151			

Table 2: Media Coverage in FY2012 - FY2014

\* 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.

For future challenges, 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 Conference of the Parties (COP) and Intergovernmental Panel on Climate Change (IPCC) meetings, and important publications such as the New Climate Economy and the Deep Decarbonisation Pathways Project (DDPP).

#### (iii) Download of IGES Publications

The number of downloads from the IGES website has shown increasing trends overall. In FY2013, the number dropped compared with the previous year, but it exceeded the number in FY2010 which was the first year of the Fifth Phase. Thus, the number of downloads is also expected to increase in line with the number of publications.

The number of downloads (DL) from IGES publications including databases is shown in Figure 3 below. By and large, the number shows a stable trend, and FY2014 saw slight increase over that of

the previous year.

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.

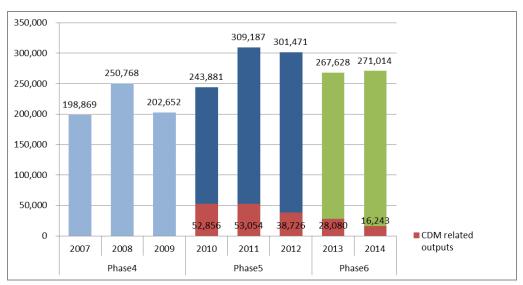


Figure 3: Download of IGES Publications (FY2007-FY2014)

# 2. Financial Status<sup>3</sup>

Overall revenue in FY2014 was JPY3.0 billion, and the expenditure was JPY2.8 billion. This has resulted in a surplus of about JPY192 million. This surplus was mainly brought by the delay of recruiting and staffing to the positions for emerged projects, as well as more efficient operations in research areas.

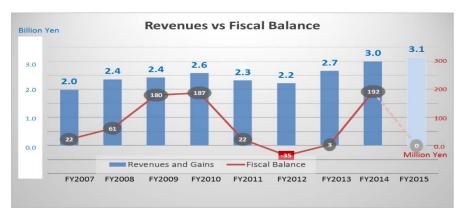


Figure 4: Revenue and Fiscal Balance (FY2007 - FY2015 (projected))

<sup>&</sup>lt;sup>3</sup> IGES Strategic Research Activities and Incorporated Accounts

## Revenue trend

On the revenue side, basic funding from the Ministry of the Environment of Japan increased slightly at JPY520 million, while financial support from local governments continues to be on the decline. Overall, the core fund level has been gradually decreasing over the years. This has necessitated making intensified efforts to gain more external funds from various sources. As a result, IGES gained about JPY2.1 billion in external funds, which is about JPY280 million more than in FY2013.



Figure 5: Trends in income (FY2007 - 2015 (projected))

# (i) 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. In addition, IGES newly acquired some large-scale projects in several areas that are important for IGES future project development, such as a project on the 10 Years Framework Programme on sustainable consumption and production (SCP), as well as contracts on the Climate Technology Centre and Network (CTCN) and Environmental Impact Assessment (EIA).

Looking at funding sources, MOEJ related funds still occupy a large part of external funds with about 90% of projects. 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. The results in FY2014 showed a slight decline since some major overseas funded projects have been carried over to FY2015. However, an increasing trend was shown in overall. Some of the main funding donors are ASEAN Secretariat, Asian Development Bank (ADB), Clean Air Asia (CAA), International Institute for Sustainable Development (IISD), UN Environment Programme (UNEP), and US Agency for International Development (USAID).<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> The projects which are carried over to FY2015 are included.



Figure 6: External funding from international organisations (2010-2015 (projected))

## **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 the remaining roughly 20% for administrative costs. 58% 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.

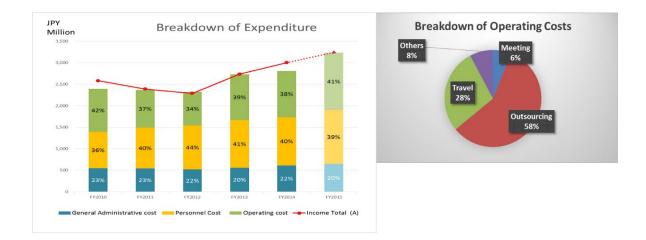


Figure 7: Breakdown of expenditure (2010 - 2015 (projected))

## 3. Governance

In FY2014, further progress was made to strengthen the financial management of the institute. First, the IGES Finance Committee was established to monitor the financial situation of IGES on a regular basis, so that necessary actions can be taken in a timely manner. Second, a certain amount of expenses has been budgeted as "investment" (3% of total income) for each fiscal year and a system was prepared to fund those activities considered valuable for future development in a more timely manner by setting up a strategic operation fund in addition to the current strategic research fund. Activities supported under these budgets in FY2014 include the development of the Japanese version of the 2050 Pathways Calculator (2050 Low-Carbon Navigator), ISAP, relocation and expansion of the IGES Tokyo office considering co-location with ICLEI Japan, and setting up theIGES South Asia desk at TERI, India.

In addition, a "Deposit for Promoting Strategic Initiatives" has been newly set up as a special reserve asset (FY2014–FY2020)<sup>5</sup>. This deposit aims to fund IGES's own initiatives and activities as a strategic investment, which should contribute to achieving the goal of the ISRP7 in line with the Medium-Long-Term Strategy. Those initiatives will include multi-year projects as well as the 20<sup>th</sup> anniversary events around FY2018. In FY2014, JPY191 million has been reserved under this deposit.

<sup>&</sup>lt;sup>5</sup> This is to be officially approved by the seventh Board of Directors and Trustees Meetings in June 2015.

	FY 2009-FY2012	FY2013-FY2014	Remarks
	(Fifth Phase)	(Sixth Phase)	
International recognition	>	>	Encouraging recognition by two international ranking schemes.
Impacts			Specific impact cases clearly increased in last two years.
Outputs			Levels of outputs recorded a slight increase from previous year.
Finance Overall balance		7	Negative balance in FY2012 was effectively addressed.
External funds			Highest levels of external funds in FY2013 and FY2014
Governance	$\longrightarrow$		Improvements in financial management, etc.

 Table 3: Summary Table: Overall Performance Trends in the First Half of the Sixth Phase

# II. Strategic Research

For each research area under the Integrative Strategic Research Programme for the Sixth Phase (ISRP6), priority issues are determined and strategic research activities planned and implemented in line with the "Three Modes of Operation for Strategic Research (Synthesis Research/ Policy Research for Problem-solving /Networking and Strategic Operation)" and "Three Criterion for Strategic Research (Overall and Comprehensive Vision/ Added Values/ Quickness and Timeliness)". In FY2014, strategic research activities were conducted in the seven research areas under the overall management of PMO at the Headquarters and satellite centres/offices.

## 1. Climate Change and Energy Area

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

## <FY2014 Major Achievements (Outcomes and Impacts)>

- IGES proposal for establishing a researchers' consortium for ex-ante review of INDCs was listed by the Nordic Council as required reading, and a similar idea was incorporated into the ADP Co-chairs' final draft decision text for COP20.
- A research report on Fast-Start Finance that IGES co-authored with WRI and ODI was referred to at COP20 negotiation sessions several times.
- An MOU was signed between IGES and the Department of Environment, Bangladesh to support Bilateral Offset Credit Mechanism (BOCM)
- Based on Joint Crediting Mechanism (JCM) capacity building for local validators and verifiers conducted in Indonesia, Mongolia, and Viet Nam, the first accrediting government body as well as the first certified entity was established in Mongolia.
- IGES proposal on market mechanisms (Framework for various approaches and clean development mechanism (CDM)) was submitted to the UNFCCC process and the views expressed were incorporated in the technical paper and draft text.
- Based on cooperation with the UNFCCC secretariat on the CDM database, ADB-UNFCCC joint regional workshop, an MOU and a workplan on the Regional Collaboration Centre in Bangkok were developed. IGES also has becomes a knowledge partner with ADB for the operation of JCM Fund managed by ADB.
- Building on collaboration with the City of Yokohama during ISAP and Smart City Conference, an MOU was
  signed between IGES and the City of Yokohama, which served as the basis for IGES to be part of the
  "Y-PORT Center" (Yokohama Partnership of Resources and Technology) where the City, private companies,
  network organisation (CITYNET) and IGES work together to promote sustainable and low carbon society in
  emerging cities in developing countries.
- A project concept was formulated at the ADB on smart city development in Asia for the establishment of Center of Excellence (COE) and city to city collaboration, based on the implementation of the Asia Leadership Programme jointly implemented by ADB, Ministry of Environment Japan, and IGES to support innovative and forward looking transformation and capacity building for Ministerial executives and high level government officials in charge of environment and sustainable development in Asia.

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

This task aims to provide the UNFCCC process with relevant recommendations on the design of a comprehensive climate change regime, as well as on the operational rules and guidelines for pre-2020 enhanced actions.

**[Major External Fund]** ERTDF<sup>1</sup>(MOEJ: Ministry of the Environment, Japan), United Nations Environment Programme (UNEP)

## <Major Achievements towards Impact Generation>

- IGES proposal for establishing a researchers' consortium for ex-ante review of INDCs was listed by the Nordic Council as required reading, and a similar idea was incorporated in the ADP Co-chairs' final draft decision text for COP20.
- IGES Working Paper No. 2014-05.「2020 年以降の気候変動対策に関する米中合意目標の評価」 (Assessment of the US-China agreement on reduction target after 2020) (December 2014) This paper is one good example of a quick response to new policy development, and caught the attention of news media, including *Yomiuri Shinbun* and *NHK*.
- The National Designated Entity (NDE), focal point of the Climate Technology Centre and Network (CTCN) was established in Bangladesh and Viet Nam based on the IGES's support for the technology mechanism and a review of technology needs assessment for eight countries in Asia.

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

In order to achieve low-carbon development in a rapidly growing Asia, energy and climate change policies adopted by each country will have significant consequences. This research aims to promote a resilient and sustainable energy demand-supply system through quantitative analysis on mid-long term energy and climate change policies.

[Major External Fund] ERTDF (MOEJ), World Resources Institute (WRI), Korean Environment Institute (KEI)

## <Major Achievements towards Impact Generation>

- Journal article on Japan's post-Fukushima energy and climate policies published in *Renewable and Sustainable Energy Reviews*, for the thorough review of Japan's climate policy. This research project was conducted under the research project of World Resources Institute (WRI), internationally recognised think-tank and the results were presented at UNFCCC Subsidiary Body meeting, Policy dialogue on climate change for Japan-China and Japan-India, respectively.
- Journal article on CO<sub>2</sub> emissions reduction from the Japanese iron and steel industry published in *Journal of Cleaner Production* was developed and the results were incorporated to the AIM model developed by the NIES for the discussion on the setting of target for Japan.
- IGES working paper on Japan's carbon budget, submitted for publication in *Climate Policy*. The numbers presented in this paper served as a reference for joint statements by several organisations on post-2020 climate mitigation target announced in September 2014

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

In order to establish low-carbon society in Asia, it is important to develop a social infrastructure to measure, report

<sup>&</sup>lt;sup>1</sup> Environment Research and Technology Development Fund

and verify (MRV) greenhouse gases (GHGs) for various segments of society, i.e. national and local government, private sectors and research organisations including non-governmental organisations. It is also vital to promote low-carbon development policies and measures and to encourage activities that will reduce emissions from each activity. This research task intends to integrate research and practice by providing direct support for the development of an institutional framework on MRV for the JCM and its project and methodology development, combined with capacity building for various stakeholders.

## [Major External Fund] MOEJ

## <Major Achievements towards Impact Generation>

- An MOU was signed between IGES and Department of Environment, Bangladesh to support Bilateral Offset Credit Mechanism (BOCM)
- Based on JCM capacity building for local validators and verifiers conducted in Indonesia, Mongolia, and Viet Nam, the first accrediting government body as well as the first certified entity was established in Mongolia.
- Contributions were made to the technical development of capacity for the JCM such as rules and procedures, grid emission factors, by organising a total of 11 workshops for JCM partner countries such as Viet Nam, Mongolia, Bangladesh, Lao PDR, as well as Cambodia, which became a JCM partner country in April 2014.

## CE\_4: Climate Finance

Developing countries face various resource constraints when trying to effectively promote climate change policies. It is critical for all governments and stakeholders to understand how financial resources will be mobilised. Equally significant is the way in which these resources are accessed and utilised. This task focuses on the roles and functions of existing and emerging institutional arrangements, financial initiatives and negotiation agendas under and outside the UNFCCC.

# [Major External Fund] MOEJ, JSPS/KAKENHI<sup>2</sup>

## <Major Achievements towards Impact Generation>

- Mobilising International Climate Finance: Lessons from the Fast-Start Finance Period. IGES, WRI and ODI (2013) The research report on Fast-Start Finance that IGES co-authored with WRI and ODI was referred to at COP20 negotiation sessions several times.
- One peer-reviewed paper published in *Energy Policy*, titled: "Ex-post assessment of China's industrial energy efficiency policies during the 11<sup>th</sup> Five-Year Plan". The paper was presented at workshops by the WRI and ADB.
- Discussion Paper / Working Paper, "Finance for the International Transfer of Climate Change Mitigation Technologies"\_2014-11, was developed based on a session during ISAP and subsequent discussion with relevant stakeholders.

## CE\_5: Market Mechanism

The purpose of this task is to support the establishment of institutional frameworks and capacity development for the effective implementation of market-based mechanisms (namely, Emission Trading and Crediting Mechanism) at the international level (UNFCCC). To do so, this task will develop rules for market mechanisms as well as a

<sup>&</sup>lt;sup>2</sup> Grants-in-Aid for Scientific Research by Japan Society for the Promotion of Science (JSPS)

database, methodology and a guidebook for GHG emissions and reductions calculation, and carry out analytical research on market mechanisms for making improved proposals.

[Major External Fund] MOEJ, UNFCCC Secretariat, Asian Development Bank (ADB)

#### <Major Achievements towards Impact Generation>

- IGES proposal on market mechanisms (Framework for various approaches and clean development mechanism (CDM)) was submitted to the UNFCCC process and was incorporated into the technical paper and draft text.
- Based on close cooperation with the UNFCCC secretariat on the CDM database, IGES-ADB-UNFCCC joint regional workshop, an MOU and a workplan on the Regional Collaboration Centre in Bangkok were developed for finalisation. IGES also became the knowledge partner with ADB for the operation of the JCM Fund managed by ADB.

## CE\_6: Asia Low Carbon Strategy Project

By focusing on Japanese environmental policy and technologies, which can be connected to green economy and growth in the Asia-Pacific region, the project aims to effectively promote low-carbon development at the sub-regional level through international collaboration involving diverse stakeholders, including municipalities, the central government, private sector and research organisations.

## [Major External Fund] MOEJ

#### <Major Achievements towards Impact Generation>

- Building on the successful collaboration with the City of Yokohama during ISAP and the Smart City Conference, an MOU was signed between IGES and the City of Yokohama, which served as the basis for IGES to be part of the "Y-PORT Center" (Yokohama Partnership of Resources and Technology) where the City, private companies, a network organisation (CITYNET), and IGES work together to promote sustainable and low carbon society in the emerging cities in developing countries.
- A project concept was formulated at the ADB for smart city development in Asia through the establishment of a Center of Excellence (COE) and city-to-city collaboration, based on the implementation of the Asia Leadership Programme jointly implemented by ADB, the Ministry of the Environment Japan, and IGES to support innovative and forward looking transformation and capacity building for Ministerial executives and high level government officials in charge of environment and sustainable development in Asia.

## 2. Sustainable Consumption and Production Area

The SCP Area currently has two areas of specific expertise and niches: its research expertise and policy support on 3R implementation and resource efficiency issues in Asia (especially on recycling policies and EPR) and engagement to SCP-related global processes, especially those coordinated by UN systems and the EU. The area has relatively stable funding and future prospects for funding for 3R, recycling and climate-waste related issues from MOEJ. The area recently contributed to the establishment of IGES Centre Collaborating with UNEP on Environmental Technologies (CCET). By utilising existing expertise and strength, the area has gradually shift its emphasis in provoking regional discussion towards urgent needs of actions for resource saving and sustainable consumption in response to growing resource crisis.

#### <FY2014 Major Achievements (Outcomes and Impacts)>

• 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<sup>3</sup>.

- SCP Area drafted UNEP's Global Strategy for Sustainable Consumption and Lifestyles for the next 10 years for the use of inter-UN-agency coordination and discussions.
- SCP Area, in collaboration with United Nations Centre for Regional Development (UNCRD) and MOEJ, planned and launched a new international collaborative project for publication of synthesis assessment of 3R policy implementation in Asia and the Pacific.
- IGES has been providing substantive inputs for updating the OECD Guidance Manual on ERP of 2001, providing findings and recommendations from EPR case studies on the home appliance recycling law in Japan.
- Tools for enabling quick assessment of Short-Lived Climate Pollutants (SLCP) emissions from different solid waste management options were developed by IGES. Tools were designed to support municipal decision makings, through which a co-benefit approach on climate and 3Rs nexus will be better understood and promoted at the municipal level.
- IGES contributed to the organization of a side event at the UN-World Conference on Disaster Risk Reduction in Fukushima. Based on recommendations from Fukushima Action Research and Decontamination Operation project conducted by IGES from FY 2012 to FY 2013, IGES contributed to development of "Fukushima Action Statement" which was endorsed by the participants of the Conference.

# SCP\_1: Transition to Sustainable Consumption and Production in the context of developing Asia

This task aims to generate an improved understanding of how developing countries can steer away from the traditional development model – based on mass-production, mass-consumption, and systems that require infinite economic growth – and what opportunities and challenges there are with formulating and implementing significant changes. Along these lines, in FY 2014, a short technical report was co-published with UNEP as a background document titled "Addressing Climate Change Through Actions Targeting Lifestyles" for Sustainable Lifestyle and Education (SLE) Component Launch of SCP 10 YFP. To clarify IGES's research direction on SCP Area, the first draft of a mid-term and long-term strategy (MLS) for SCP Area was developed.

[Major External Fund] MOEJ, SWITCH-Asia<sup>4</sup>, UNEP

## <Major Achievements towards Impact Generation>

- In collaboration with UNEP, IGES co-published a background document titled "Addressing Climate Change Through Actions Targeting Lifestyles" and contributed to the launch of Sustainable Lifestyle and Education (SLE) Component of SCP 10 YFP in November 2014.
- SCP Area helped to promote SLE Component of SCP 10YFP by providing multi-stakeholder advisory committee (MAC) member and support for the organization of the 1<sup>st</sup> meeting of MAC in Japan.

## SCP\_2: Sustainable Living and Consumption

This task tried to mainstream SCP 10YFP in the context of developing Asia. This component supported MOEJ, UNEP secretariat and other relevant stakeholders to develop sustainable lifestyle and education component under

<sup>&</sup>lt;sup>3</sup> 10 Year Framework Programme

<sup>&</sup>lt;sup>4</sup> http://www.switch-asia.eu/

SCP 10YFP. In addition, IGES's own approach would be on alternative approaches to meeting people's needs, without overburdening the environment. This will be examined from a REDUCTIONS approach – towards achievement of overall reductions in material throughput and energy use in society. Another component is more specific and uses the example of energy efficient housing to illustrate sustainable lifestyles. Specifically it looks at barriers to development and implementation of energy efficient housing in Asia. This will aim for the development of policy reports on barriers and approaches to energy efficient housing in Asia, to be co-published with ADB. **[Major External Fund]** UNEP, MOEJ

## [Major External Fund] UNEI, MOEJ

#### <Major Achievements towards Impact Generation>

- SCP Area completed the development of UNEP's Global Strategy for Sustainable Consumption and Lifestyles for the next 10 years for the use of inter-UN-agency coordination and discussions.
- IGES engaged in a programme of the sustainable lifestyle and education (SLE) component of SCP 10YFP. The SLE Programme of SCP 10YFP will develop several potential pilot case studies..
- Special Sessions on a reductions approach for unsustainable and inefficient resource use was organised at the World Resource Forum in October 2014. Five to eight factsheets were presented at the World Resource Forum and were reflected in the messages from the forum.
- IGES conducted a pilot project on energy efficient housing in Cambodia, Indonesia and Viet Nam in collaboration with Jyukankyo Research Institute. This project conducted surveys on energy consumption of 300 households for each country and provided feedback towards energy saving practices for the households. Based on the survey, IGES examined possible energy saving projects for each country in collaboration with national governmental agencies and research organisations. In Viet Nam, a project with expanded scope will be launched from FY 2015.

## SCP\_3: Resource Circulation and Integrated Waste Management

Task 3 of SCP Area continued to engage in effort to mainstream 3R policy indicators for the member countries of the Regional 3R Forum in Asia and the Pacific (with the participation of about 33 member countries, and international organisations, aid agencies, private companies, NGOs, and research institutes). In relation to this, this task engaged in the planning and drafting process of for the State of the 3Rs in Asia and the Pacific, a synthesis assessment report on 3R policy implementation in the region. Methodology development for sustainability assessment of e-waste recycling system was finalised by conducting comparative analysis for different economic settings of recycling market. IGES's existing expertise on EPR was shared at OECD Global Forum in June 2014 and a case study developed by IGES was recognised as part of the process to update the OECD guidance manual on EPR. Growing competency on a climate and waste nexus was further established in the context of CCAC<sup>5</sup> MSWI<sup>6</sup> and collaboration with UNEP IETC.

[Major External Fund] MOEJ, CCAC-MSWI

## <Major Achievements towards Impact Generation>

• The Asia Pacific 3R White Paper (State of the 3Rs in Asia and the Pacific) project proposed by IGES and partners was launched. Two drafting committees were convened in Cebu and Tokyo with the participation of top

<sup>&</sup>lt;sup>5</sup> Climate and Clean Air Coalition

<sup>&</sup>lt;sup>6</sup> Mitigating SLCPs from the Municipal Solid Waste Sector

regional experts on 3R policies and waste management.

- EPR policy has been promoted by OECD with an update to the OECD EPR Guidance Manual. IGES's existing expertise on EPR was shared at the OECD Global Forum in June 2014 and a case study developed by IGES was recognised as part of process to the OECD guidance manual on EPR.
- Tools for quick assessment of municipal solid waste and Short-Lived Climate Pollutants (SLCP) emissions were developed by IGES and in the process for finalisation under the CCAC Municipal Solid Waste Initiative (MSWI).
- This task finalised quick assessment and action plan development for four cities in Asia for SLCP reduction from waste sector under CCAC MSWI.

#### SCP\_4: Fukushima Action Research on Decontamination Operation (FAIRDO)

This task tried to implement the recommendations from results of the Fukushima Action Research on Decontamination Operation (FAIRDO), which was conducted from FY2012 to FY2014. The basis of the FAIRDO project is to support the reconstruction and rehabilitation of people's lives in Fukushima. In order to do so, FAIRDO concluded that it was necessary to have a locally rooted roundtable as a place for decision making with information platform to share the relevant information with all stakeholders.

[Major External Fund] Not successful (tried to secure research funds such as JST and Kakenhi, etc)

#### <Major Achievements towards Impact Generation>

- IGES supported the organisation of a side event at the World Conference on Disaster Risk Reduction in Fukushima to share the information on post nuclear disaster activities with both international and domestic stakeholders.
- IGES and UNU-IAS organised a collaboration session on "Stakeholder Communication for Informed Decisions: Lessons from and for the Displace Communities of Fukushima" at ISAP. This session focused on the issues of stakeholder communication to facilitate informed decision-making and informed policy-making in the process of recovery from complex disaster, to bring forward lessons from Fukushima and international experience relevant for its recovery.
- IGES and UNU-IAS jointly published a report on "Engaging Communities in Decisions after Complex Disaster: Lessons from Fukushima". This was developed through the collaboration between IGES-FAIRDO and UNU-Fukushima Global Communication project. This showed up issues related to the decontamination operation and a discussion emerged on the question of who the operation is for. This concluded that participatory recovery planning was vital.

## SCP\_5: SCP Policy Process

Overall, in collaboration with other Areas such as CE, GE, KUC, BRC, and IPSS, SCP area engaged in several important policy processes which can shift the area focus from downstream into upstream issues including processes such as UNEP International Resource Panel, SWITCH Asia, UNEP Sustainable Consumption Strategy development, SCP 10 years framework programme, CCAC municipal solid waste initiative, OECD's Global Forum on EPR, Regional 3R Forum in Asia, and seeking collaboration with UNEP/IETC.

#### <Major Achievements towards Impact Generation>

• 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 signed by the SG of UNEP and Chair of the Board of Directors of IGES.

• IGES supported UNEP International Panel for Sustainable Resource Management to organise working group meeting on Material Flow Accounting (MFA) in September 2014.

## 3. Natural Resources and Ecosystem Services Area

The goal set for NRE in the Sixth Phase is to assist countries in meeting their natural resource management challenges through solution-oriented and nexus research on high priority issues related to forest and biodiversity conservation, climate change adaptation, and water resource management.

## <FY2014 Major Achievements towards Impact Generation>

- The REDD+ community-based forest monitoring manual was used by international organisations to design training workshops in Thailand and Viet Nam. The manual was translated into Vietnamese by an international organisation on its initiative. IGES inputs are reflected in the Japanese government submission on REDD+ safeguards.
- The IGES report on timber legality was translated into Chinese by an international organisation on its initiative.
- Inputs were requested and shared with a World Bank nexus study and the UNESCO World Water Development Report 2015.
- Based on request, IGES signed 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 its partners.
- Technical inputs provided by the IGES Adaptation team were used by the Ministry of the Environment of Japan (MOEJ) in its submissions to the Conference of the Parties (COP) of the United Nations Framework Convention on Climate Change (UNFCCC) and IPCC. Over 500 people participated in IGES symposiums on IPCC reports.
- Under the project to support integration of climate change adaptation into development planning, technical outputs and policy recommendations were used by participating local governments in the Philippines to improve their development and land-use planning.

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

Under Task 1 on livelihood resilience, synthesis research on natural resource management nexus issues, particularly the competition over land and water between food, energy, and forest management sectors, was conducted. The following two goals were set for this task in FY2014:

(1) Synthesis research

Increase understanding of how policy and administrative integration can be organised to effectively deal with land-use and natural resource competition

(2) Japan Science and Technology (JST) Project

Develop a methodology to measure the association between Earth satellite observations and international environmental policy.

The major activity conducted for (1) was a literature review. This contributed to the development of the IGES NRE Medium-Long Term Strategy and the NRE Strategies and Activities Brochure. The activities conducted for (2) were

an assessment of trends in the use of remote sensing to address selected major global environmental issues, presentations at symposiums, and the drafting of two publications.

[Major External Fund] Japan Science and Technology fund (JST)

#### <Major Achievements towards Impact Generation>

- "A Study on Methods for Assessing the Impact of Satellite Observations on Environmental Policy," presented at 65th International Astronautical Congress, Toronto, Canada
- "Recent trends in the use of remote sensing to address environmental issues," presented at 57th RSSJ, Nov. 2014, Kyoto

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

Under this task, community participation in forest monitoring, REDD+ (reducing emissions from deforestation and forest degradation, and enhancing forest carbon stocks) project design, competition over land between biofuels feedstocks and natural forest, and bottlenecks in the REDD+ negotiations were studied. Six research components comprised this task in FY2014. Under Component 1, 15 project profiles were constructed for the IGES REDD+ Online database. Activities under Component 2 included action research on community-based forest monitoring in Indonesia, Viet Nam, Laos and Papua New Guinea, and assisting with JICA training in Laos. Component 3 produced issue briefs on the REDD+ negotiations and a submission to the UNFCCC on REDD+ safeguards. Under Component 4, studies were conducted on deforestation drivers and annual rates of deforestation in Thailand. Component 5 provided inputs to the development of REDD+ guidelines for the Japan Credit Mechanism (JCM) through expert meetings. Under Component 6, a report was drafted on legality risk management strategies for companies handling wood and wood products.

[Major External Fund] MOEJ, APN

#### <Major Achievements towards Impact Generation>

- Community-Based Forest Biomass Monitoring downloaded about 17,000 times by December 2014.
- The Forest Conservation Team was invited to:
  - act as a resource person at the "Regional Knowledge Exchange Event on Participatory Forest Monitoring" led by US-AID in November 2014 at Lam Dong, Viet Nam;
  - (together with the Global Canopy Programme and other partners), co-organise the networking event
     "Supporting the Use of Community Data and Indigenous Knowledge in REDD+", December 2014, Lima, Peru.
  - Supported the International Seminar "REDD+ Finance Mechanism and Its Optimum Use How to incentivize forest conservation" held by the Forest and Forest Products Research Institute (FFPRI) in February 2015 in Tokyo.
- Held an international seminar on "Bridging Local Perspectives and Global Environmental Agendas in Forest Management" (October 2014, Tokyo) to share IGES knowledge and experiences on community-based forest monitoring, and document practical ideas on how communities can participate in the realisation of the global agendas on climate change and the conservation of biodiversity through forest management.
- Through research on deforestation drivers, provided guidance on the monitoring of annual deforestation rates and contributed to understanding of the implications of land and natural resource competition for forest cover.
  - "Environmental Sustainability and Climate Benefits of Green Technology for Bioethanol Production in

Thailand", accepted for publication by the International Society for Southeast Asian Agricultural Sciences Journal

While providing support to MOEJ at international REDD+ negotiation events, monitored and analysed the
negotiations. The IGES assessment of the state of the REDD+ negotiations and ways forward for overcoming
bottlenecks were published in Japanese in two issue briefs: UNFCCC COP20 Briefing Note, March 2015;
Bonn UNFCCC REDD+ Negotiations Briefing Note, October 2014.

## NRE \_3: Climate Change Adaptation

This task assessed community risk insurance initiatives, analysed how microfinance can contribute to household resilience and adaptive capacity, developed guidelines on project evaluation methodologies for climate change adaptation in India, and supported the Asia-Pacific Adaptation Network (APAN) and the Global Adaptation Network (GAN). The research under this task in FY2014 aimed to facilitate adaptation at sectoral and national levels in the developing Asia Pacific by identifying and operationalising means to measure progress in adaptation, promoting the culture of risk reduction and resilience through mechanisms such as risk insurance and microfinance, and by developing tools for adaptation decision-making such as developing vulnerability and capacity assessment indexes.

[Major External Fund] MOEJ, APN, AECOM International Development (AECOM)

#### <Major Achievements towards Impact Generation>

- Contributed to prioritisation of adaptation practices in flood-prone areas of the Gangetic Basin through analysis and sharing results of participatory field surveys
  - Event (March/2015; Kathmandu, Nepal): Developing Guidelines for Ensuring Effective Adaptation to Climate Change: From Science to Action
  - Peer reviewed journal paper (Feb/2015; India): Gender and economic dimensions of adaptation effectiveness (submitted)
- Increased the number of tools available for understanding the effectiveness of risk insurance through development of a methodology based on pilot surveys in India and Bangladesh. The research findings were presented at international conferences and training programmes
  - Event (July/2014; Kuala Lumpur/Malaysia): Regional stakeholder consultation workshop on Evidence for Disaster Risk Reduction and Climate Change Adaptation Effectiveness of Insurance: Challenges and Opportunities
  - IGES Research Report (March/2015; Hayama/Japan): Effectiveness of Insurance for Disaster Risk Reduction and Climate Change Adaptation: Challenges and Opportunities
- Contributed to better understanding of the role of microfinance in climate change adaptation through literature review and field studies in Bangladesh:
  - IGES Research Report (March/2015; Hayama/Japan): The Role of Microfinance Institutions in Climate Change Adaptation: Drawing from Experiences in Bangladesh
- Increased the number of tools available for assessing vulnerability to risks by developing a Vulnerability and Capacity Assessment Index for India based on a literature review and community consultations
  - Research Report (March/2015, Mumbai/India): Vulnerability and Capacity Assessment Index (VCAI) for Climate Change Adaptation of Natural Resource-based Communities

- Excel-based tool (March/2015, Mumbai/India): Vulnerability and Capacity Assessment Index (VCAI) for Climate Change Adaptation of Natural Resource-based Communities
- Contributed to better understanding of non-economic loss and damage through development of an assessment methodology
  - Event (October/2014, Kuala Lumpur/Malaysia): Climate extremes and disaster risk reduction

## NRE\_4: Water Resource Management

This task undertook nexus research on governance, focusing on the water-land linkage, conducted research on sustainable wastewater management, and supported knowledge sharing and networking through the Water Environment Partnership in Asia (WEPA). The research aims to contribute to efficient water resource use and to local sustainability by proposing integrated water resource management (IWRM) models and modes of governance for different socio-economic settings.

In FY2014, the activities conducted under the nexus research were co-organising a workshop (December 2014, Hayama) with the United Nations Institute for Integrated Management of Material Fluxes and Resources (UNU FLORES) to establish a "nexus observatory" and providing inputs to an international conference and international organisations based on the results of surveys in India and other Asian countries. To promote sustainable wastewater management as a strategy to increase resource efficiency, a workshop on wastewater management was organised in Colombo, Sri Lanka in February. This workshop aimed to support local/national policy makers in developing their knowledge base on wastewater management. To promote knowledge generation, sharing and networking through WEPA, seminars and meetings were organised and data on water management issues in Asian counties was gathered through literature reviews and interviews.

[Major External Fund] MOEJ, International Water Management Institute (IWMI) and World Bank

#### <Major Achievements towards Impact Generation>

- WEPA Outlook on Water Environmental Management in Asia 2015 published and distributed at the 7th World Water Forum to share the latest information on key sustainable water management issues in the Asia-Pacific region with the participants.
- Research paper "Comparison of Water Quality Management Framework in Asian Countries" prepared and presented at IWA 1st Specialist Conference on Municipal Water Management and Sanitation in Developing Countries to share analysis and information on water quality management issues with the participants.
- Research findings from groundwater study provided to UNESCO World Water Development Report 2015
- Published policy brief "Placing Water at the Core of the Sustainable Development Goals (SDGs): Why an Integrated Perspective is Needed". The research findings on SDGs were delivered to the twenty third meeting of United Nations Secretary-General's Advisory Board on Water and Sanitation (UNSGAB) in Tokyo on October 2014.
- Organised WEPA session at the 11th International Symposium on Southeast Asian Water Environment in Bangkok on November 2014 to share information on key water issues across WEPA member countries.

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

This task conducted research on the resilience of socio-ecological production landscapes, supported the International Partnership for the Satoyama Initiative (IPSI), generated outputs on the valuation of ecosystems services and natural capital, and contributed to the development of guidance on environmental performance for

businesses.

In FY 2014, the Satoyama Development Mechanism (SDM) was managed under this task and supported 12 projects in 10 countries. The task co-authored a toolkit on using resilience indicators and organized a Parallel Session at ISAP 2014, an Expert Workshop on IPSI Case Studies and two side-events at CBD COP 12. The task also contributed to a research report with GE area on measuring and visualising ecosystem services in Japan and a brochure on the Land Health Index, and assessed the role of ecosystems in reducing and mitigating impacts from natural hazards. Furthermore, the task completed a draft voluntary governance standard for forest management in Nepal and organized a stakeholders' workshop to discuss the standard. The task produced several other outputs, including a booklet to introduce business activities for biodiversity conservation and draft guidance on biodiversity for industry groups in Japan. The task also contributed to the development of a biodiversity strategy for Hino Motors, Ltd.

[Major External Fund] UNU-IAS、 MOEJ, GEF

#### <Major Achievements towards Impact Generation>

- Invited by the Global Environment Facility (GEF) to develop a proposal on Satoyama for a 4-year project.
- Increased awareness of the contribution of the SDM to sustainable management and use of biodiversity and ecosystem services through an Experts Seminar and a side event at CBD COP 12 and co-authored a toolkit on using resilience indicators, which presented during the World Park Congress.
- Disseminated the findings of research on ecosystem valuation methods for Ecosystem-based Disaster Risk Reduction (EcoDRR) and provided information for the development of a MOEJ policy on EcoDRR.
- Prepared a MoU for IGES and the Nepalese government, in part to facilitate use of the forest governance standard.
- Contributed to greater corporate social responsibility in Japan by developing several publications for MOEJ including "Japan's Biodiversity Initiatives based on Private Sector Engagement" and draft guidance for business groups to develop their biodiversity strategies.
- Pesented research on best practices for private sector biodiversity strategies in several seminars and contributed to the development of Hino Motors Ltd. biodiversity strategy.

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

This task supported activities related to the Intergovernmental Panel on Climate Change (IPCC) by organising public awareness events on the latest findings of climate science, facilitated collaboration between APAN and the International Research Network for Low Carbon Societies (LCS), and conducted a pilot project in the Philippines to develop an approach for integrating climate change mitigation and adaptation in local government land use planning and management.

This task aims to enhance the resilience of human and natural systems that are vulnerable to climate change in the Asia Pacific region. To achieve this objective, three activity components were conducted in FY2014. Component 1 supported the Ministry of Environment of Japan (MOEJ) to prepare its positions and statements at COP and IPCC meetings by reviewing and analysing submissions from other parties and by drafting submissions for MOEJ. To raise awareness and encourage public debate, this component also disseminated the latest information on climate science and policy through symposiums and side events. Activities under Component 2 to share knowledge and

resources between APAN and LCS included regular communications, exchanging information on ongoing and planned activities, sharing knowledge and lessons learned from completed activities, sourcing funding, and designing and implementing joint activities. Under Component 3 on integrating climate change adaptation and mitigation measures, the task supported local governments in the Philippines to improve land-use planning by conducting scenario analysis, risk assessment, and countermeasure development.

## [Major External Fund] MOEJ

#### <Major Achievements towards Impact Generation>

- Provided technical inputs used by MOEJ in its submissions to COP and IPCC.
- Organised symposiums in July, October, and December 2014 with the participation of about 500 people, which contributed to raising public awareness on IPCC and climate change issues.
- Promoted knowledge and resource sharing and utilisation between APAN and LCS through regular communications and organising the APAN-LCS joint session on integrating climate actions at the Adaptation Forum in October 2014.
- Through the pilot project in the Philippines, produced technical outputs and policy recommendations that were used by local governments to improve their development and land-use planning. Secured national support for the project through coordination between local and national levels. An issue brief on land-use management and a journal article on mapping residential areas were published.

## 4. Green Economy Area

Transition to a green economy requires fundamental changes in the current models of achieving economic growth. To achieve sustained and inclusive growth in Asia and the Pacific, it is indispensable to take up a green growth pathway which results in the creation of green and decent jobs, greening of investment, adoption of low-carbon, cleaner, and energy and resource-saving technologies, conservation of the natural capital and at the same time improving human well-being. Emerging Asian economies are well positioned to take a leading role in a green economy revolution. The GE Area aims to provide science and evidence-based knowledge on the effectiveness of low-carbon and green economy policies and support policy discussions through quantitative research and the development of analytical tools.

Another focused area is strengthening the involvement of industry in the process of low carbon transition due to their contributions to global GHG emissions, influence on the formation of climate change policies, and important roles being played in the development and deployment of low carbon technologies. The GE Area aims to assist the business sector in playing a more proactive role by providing practical policy proposals and developing business models through the operation of the Japan Climate Leaders' Partnership (J-CLP) and participation in other business platforms.

#### <FY2014 Major Achievement (Outcomes and Impacts)>

- IGES research report "Unveiling nature's gifts: Measuring and visualizing ecosystem services" was published based on the research work of sustainability indicators and assessment of ecosystem services and distributed in several events including CBD-COP12 to share the knowledge on how to measure ecosystem services.
- IGES contributed to International Labour Organization (ILO) Asia-Pacific Green Jobs Programme by supporting methodology development for green jobs assessment in Indonesia, i.e. the employment and environment-extended green DySAM.

- The Government of Japan adopted the Green Gift Scheme proposed by IGES and will implement it through FY2015 tax reform package.
- The Japan 2050 Low Carbon Navigator (Japan LCN), a low-carbon energy scenario simulation tool, was developed, and launched during the event of the 2014 International Forum for Sustainable Asia and the Pacific (ISAP) subject to many media coverage/articles. The Web Tool is now available on IGES website, attracting a wide-range of users, including governmental organisations (MOEJ and METI), the academia, the NGOs, and university students and related associations.

#### GE\_1 Transition to green growth/economy

This task aims to explore different models for achieving a green economy in Asia-Pacific region through policy assessment based on quantitative approaches. The task will fully utilise existing modelling techniques that have been built up at IGES during last seven years, including computable general equilibrium modelling, input-output analysis/multi-region input-output analysis, econometrics, geographic information systems and remote sensing techniques. The task will implement ongoing research projects such as the Policy Study of Environmental Economics (PSEE) on sustainable resource use, PSEE on sustainability indicators, quantification and valuation of ecosystem services, and water-energy-climate nexus study, etc. Further, new research areas will be explored to identify effective policies and measures for Asian developing countries to achieve the transition to low-carbon and green economy. Through the implementation of this task, the modelling and quantitative policy assessment capacity of the GE Area will be enhanced.

#### [Major External Fund] MOEJ, APN

#### <Major Achievements towards Impact Generation>

- Two projects of Policy Study of Environmental Economics (PSEE) supported by the Ministry of the Environment of Japan, i.e. Sustainability Indicators and Sustainable Resource Use and Management in Asia, successfully completed their three-year research at the end of FY2014. In January and March of 2015, two open symposiums were held in Tokyo to share the research results of three-year project with experts, government officials, business people and citizens who have interests in these issues.
- The study of water-energy nexus for the Ganges river basin is one of the pioneering works aimed at the quantification and integrated assessment of water-energy nexus issues at river basin level. A research team with collaborators in three countries (Nepal, India and Bangladesh) was established.

## GE\_2 Green investment and green jobs

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

**[Major External Fund]** UNEP, JSPS, International Labour Organization Regional Office for Asia and the Pacific (ILO-ROAP)

## <Major Achievements towards Impact Generation>

- For UNEP PAGE and GEI activities, IGES has become a Center of Excellence. GE Area has contributed to many UNEP publications that either were published or are being published by UNEP with due recognition to IGES.
- For ILO Asia-Pacific Green Jobs Programme, GE Area has made pioneering contribution by supporting the development of the employment and environment extended Green Dynamic Social Accounting Matrix (DySAM). The work has been highly appreciated by ILO and may be replicated in other ILO studies.
- GE Area conducted an economic and employment impact assessment of Japan's Environmental Goods and Services Sector and presented the methodology and results at a UNEP international workshop on environmental goods and services.

## **GE\_3 Business Roles and Initiatives**

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

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

[Major External Fund] MOEJ, J-CLP

## <Major Achievements towards Impact Generation>

- "Green Gift" policy, which was officially included in the Japanese Government's FY 2014 tax reform package, will allow those who construct/obtain/renovate their residence using donation from their parents/relatives will have their inheritance/donation tax deducted if they install low-carbonization facilities in their new house.
- By increasing the number of member companies from 2 to 10, the foundation of Japan-CLP was strengthened. It is important to make the positive business voice visibly bigger and stronger, thus the group will aim at expanding it members to 20 and this task will continue to play a supporting role.
- Japan-CLP has delivered policy proposals on climate policies as forward thinking businesses. These proposals were delivered to the Ministers, senior executives of the ruling party, MOE, METI and MOFA and this was also covered by media.
- Japan-CLP has gradually been positively recognised by international institutions and groups such as the World Bank Group (on carbon pricing) and We Mean Business (coalition of more than 1000 businesses).

Opportunities are emerging to deliver a positive message from Japan and contribute to the international discussion processes.

## GE\_4 Policy process and policy dialogue

This task intends to build on GE's existing analytical capability and bridge IGES strong network across international, national and city level entities to facilitate policy process for transitioning to low carbon economy. In order to facilitate carefully constructed and evidence-based policy discussions and consensus among diverse stakeholders, on both technically complex and politically challenging sustainable energy transition agenda in Japan, GE coordinates the development of the Japan 2050 Low Carbon Navigator (the Japanese version of the UK 2050 Pathways Calculator) in collaboration with IGES/CE and NIES and promotes its wide use by governmental organisations, university students, business companies, the academia and the general public. In addition, GE will work on the development of city low-carbon navigator for the promotion of low-carbon city development and the joint crediting mechanism (JCM) implementing at city level.

## [Major External Fund] MOEJ

## <Major Achievements towards Impact Generation>

- The Japan 2050 Low Carbon Navigator (Japan LCN), a low-carbon energy scenario simulation tool, was developed with two products, the Excel Model and the Web Tool, to help discuss and select among various options regarding energy security and GHG mitigations in Japan.
- Wide application of the Japan LCN has been promoted. A new and simplified approach of using Japan LCN for outreach among non-expert stakeholders is formulated and was tested with success in a key outreach event 'Jisedai Energy Workshop'.

## 5. Business and Environment (Kansai Research Centre)

The Kansai Research Centre (KRC) carries out strategic researches to promote sustainable businesses through conducting projects related to the innovation, diffusion and transfer of low-carbon technologies in Asian countries, under the area: Business and Environment.

Under Task 1, KRC built up on the outcomes of the "Research partnership for the application of low carbon technology for sustainable development (ALCT)" project, which had been conducted in India (2010-2014), to promote the application of Japanese low-carbon technologies at a wider level in India, as well as in other countries in Asia (Viet Nam, Thailand, etc.).

Under Task 2, extended from the policy-oriented research on market-based instruments (MBIs) in Northeast Asia conducted in the Fifth Phase, business practices for the diffusion of low-carbon technologies in response to carbon pricing policies were analysed to support the ongoing policy process at the country level. Furthermore, active cooperation with international organisations was promoted to input the related mechanism in technology transfer and application.

## <FY2014 Major Achievement (Outcomes and Impacts)>

- 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;
- Based on an IGES proposal, heat pump technology, which was implemented as a pilot project in India, was included in the list of technologies eligible for financing under JICA's credit line to Small Industries

Development Bank in India (SIDBI);

- Trust between related stakeholders and IGES was built, especially with Governmental agencies, research institutes, academia, and with the private sector;
- Practical knowledge of policy makers and experts in the three target Northeast Asian countries on carbon pricing policies, in particular from the business perspective, was improved by timely publication and information dissemination.

#### KRC\_1: International Transfer and Application of Low Carbon Technologies (ITAT)

Based on the outcomes of the joint research with The Energy and Resources Institute (TERI) on the application of Japanese low-carbon technologies in India, which ended in FY2013, follow-up activities in term of monitoring, capacity building, etc., have been provided to the sites where pilot projects have been implemented, to ensure that the implemented technologies are continuously and accurately operating. In addition, activities in terms of feasibility studies, awareness creation, etc. have been conducted at new sites in India to disseminate those technologies at wider/cluster level in India. Last but not least, the scope has been extended to other countries in Asia, through conducting similar activities in Viet Nam and Thailand. The findings from those activities have been disseminated at high level events such as ISAP2014 (July 2014, Yokohama), UNESCAP forum (October 2014, Seoul), Delhi Sustainable Development Summit (February 2015, Delhi), The Energy Conservation Centre, Japan's workshop (February 2015, Delhi), etc. as well as covered in various media coverages.

[Major External Fund] Ministry of the Environment Japan (MOEJ)

#### <Major Achievements towards Impact Generation>

- Tangible impact, in terms of greenhouse gas (GHG) emissions reduction and energy saving, was generated from pilot projects implemented at Indian sites;
- Heat pump technology was included in the list of technologies eligible for financing under JICA's credit line to Small Industries Development Bank in India (SIDBI);
- IGES activities in India were acknowledged under the India-Japan Energy Dialogue;
- IGES's expertise become acknowledged more, and its network expanded further, within the Kansai area through cooperation initiatives with Hyogo prefectural government., Kobe city office and businesses in Hyogo prefecture to conduct joint activities in Viet Nam and Thailand, as well as to stimulate Hyogo-Gujarat partnership;
- IGES's expertise was further acknowledged, and its network was expanded among an even wider variety of stakeholders, within India and among other Asian countries through cooperation initiatives with stakeholders to conduct activities in those countries, and/or on delivering presentations at high level events there.

#### KRC\_2: Policies towards the Innovation and Diffusion of Low Carbon Technologies

With an aim to support the ongoing progress in the pricing of carbon emissions in Northeast Asia, this project studied the penetration effects of related policies in promoting business practices in the innovation and diffusion of low-carbon technologies in the three target countries: China, Japan and the Republic of Korea. Major components carried out in FY2014 were:

- (1) Preparing questionnaire survey for companies, including selection of sectors and technologies to target, definition of policy scenarios and development of the questionnaire format
- (2) Arranging the questionnaire surveys to be conducted at companies in target sectors in China and Korea to

measure their applications of low carbon technologies

(3) Analysing the datasets collected and depiction of diffusion curves of target technologies under various policy scenarios

## [Major External Fund] Hyogo Prefecture

## <Major Achievements towards Impact Generation>

- Policy makers and experts in the research target countries become more capable in the development and practice of carbon pricing policies due to enhanced understanding of the policies from a business viewpoints.
- Academia was better able to more recognise the importance of climate policy analysis at the business level which could partly be attributed to timely publication in international journals and output dissemination at various forums and conferences.
- Better understanding of other stakeholders, like business managers and general public, was achieved related to the progress and barriers to overcome the pricing of carbon emissions.
- Local research networks in China and Korea were promoted during the implementation of policy analysis on low-carbon technology diffusion.

## 6. Integrated Policies for Sustainable Societies

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

## <FY2014 Major Achievement (Outcomes and Impacts) >

- The Post-2015 Development Agenda features negotiations on theme-specific means of implementation (including institutions and indicators) based on inputs that IGES provides to the IRF and key countries in Asia (including Japan) during the second OWG and SDG negotiations.
- The design and delivery of ESD and ESC is improved in at Thailand, Philippines, and Malaysia thanks to IGES Policy Report.
- Negotiators of the SDGs recognise the feasibility/importance of an approach that includes a more top down view of design principles for a governance goal coupled with a narrower view of theme specific means of implementation.
- Researchers in Asia use sustainability transitions framework to enable and scale transitions in concrete cases in Asia due to a publication in the "Korean Journal of Environmental Sociology Volume 18. Jun 2014".
- Bandung City of Indonesia begins to use more systematic (including tools and to measure, report, and verify greenhouse gas emissions and other co-benefits) and inclusive approaches to low-carbon planning (drawing upon experiences in Asia).
- Several countries implement SLCP mitigation actions and/or consider joining the Climate Change and Clean Air Coalition (CCAC). Countries in Northeast Asia share lessons on strengthening air pollution regulations and recognizing co-benefits.

# IPSS\_1: Governance and Institutional Framework for the Transition towards Sustainable Societies

The research tracked key policymaking processes at all levels of government and practice, especially in relation to the post-2015 development agenda. In so doing, this research contributed to other tasks in and outside IPSS. It has explored how to link this task with Task 2 on Education for Sustainable Development to further develop an integrated approach among tasks of this area. Efforts will also be made to link to other tasks that may benefit from governance related components as well as an emerging body of work on sustainability transitions, where appropriate and useful.

[Major External Fund] IRF, SD PlanNet (Managed by BRC)

## <Major Achievements towards Impact Generation>

- ASEF: The Small Planet Report proposed a way to organise the goals according to a larger concept of the means-ends framework. This framework is recognisable in the final set of goals proposed by the OWG. Both UN and countries took the means-ends framework to heart.
- SDplanNet: One example of progress post-project has been the continued bi-weekly meeting of the four operating institutions, IISD<sup>7</sup>, IGES, SF and ATPS<sup>8</sup> that has resulted in a proposed work plan outlining the continued collaboration of SDplanNet and the GN-NCSDS over the next three calendar years.

## **IPSS\_2: Education and Learning for Sustainability**

The Education and Capacity Development for Sustainable Development task aims to provide strategic policy recommendations and capacity building inputs to strengthen institutional structures/processes to achieve transformative learning for sustainable development especially focusing on international processes on Education for Sustainable Development, regional processes on Education for Sustainable Consumption, and local and urban processes for learning on Sustainable Lifestyles. Education and Capacity Development for Sustainable Development must address whole-systems learning opportunities and engage formal, non-formal, and informal education to support transitions towards sustainable societies.

[Major External Fund] Kanagawa Prefecture, MOEJ

## <Major Achievements towards Impact Generation>

- UNESCO and UNEP each requested IGES to facilitate workshops for the UNESCO conference respectively one on Monitoring and Evaluation of ESD and the other on Sustainable Lifestyle and Education.
- The design and delivery of ESD and ESC improved in Thailand, Philippines, and Malaysia thanks to IGES Policy Report.
- Researchers in Asia used the sustainability transitions framework to enable and scale transitions in concrete cases in Asia due to a journal publication in Korea.

## IPSS\_3: Life Style Change and Energy Consumption towards Low-Carbon Cities

In collaboration with the related research on low-carbon cities being conducted by Kitakyushu Urban Centre, this research promotes relevant practical studies with environmentally advanced cities in the Kanto region (Tokyo,

<sup>&</sup>lt;sup>7</sup> International Institute for Sustainable Development

<sup>&</sup>lt;sup>8</sup> The African Technology Policy studies Network

Yokohama, Kawasaki etc.) Currently, Japanese cities have already been aiming for a major transformation from polluted cities to green cities, and based on the concept of environmental cities of the future and green innovation, there have been developments by local authorities on various levels. Through the coordination and dissemination of experiences in sustainable city planning that have been promoted recently in Japan, plans are being made to contribute to low-carbon, resource circulation type infrastructure and the development of leapfrogging, which will be highly significant in the near future in Asian cities.

## [Major External Fund]ERTDF/MOEJ

#### <Major Achievements towards Impact Generation>

- IGES supported and made contributions to an MOEJ project on city-to-city cooperation between Bandung, Indonesia and Kawasaki, Japan
- MOEJ awarded a project to IGES on a city database with indicators for evaluating the economic, social and institutional ability required for low carbon development.
- UN consultation process named "Data revolution for sustainable development" recognised the city database as a possible contribution to SDGs.
- Papers on environmentally sustainable transport were accepted and presented at SEEPs and the Transport Research Board meeting.
- United Nations Natural Resource Forum accepted two peer reviewed articles on environmentally sustainable transport.

## IPSS\_4: Co-benefit Approach in Asia

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

[Major External Fund] MOEJ, ADB, Clean Air Asia (CAA)

## <Major Achievements towards Impact Generation>

- United States Agency for International Development (USAID) featured Asian Co-benefits Partnership (ACP) first white paper on the low emissions development (LEDs) strategy website.
- United Nations Environmental Programme Regional Office for Asia and the Pacific (UNEP ROAP) and Regional Resource Center for Asia (RRCAP) promoted the ACP at meetings on air pollution and the climate change market mechanisms.
- Asian Development Bank (ADB) invited IGES to support the preparation of ADB policy brief on climate change and gender.
- Norweigan Development Fund (NDF) requested IGES to submit proposal for extension of ADB gender and

climate project.

- Stockholm Environmental Institute (SEI) invited IGES to co-author UNEP report on short-lived pollutants (SLCPs) in China.
- The Climate Change and Clean Air Coalition (CCAC) awarded IGES and six other partner organizations USD 525,000 to develop regional assessment on SLCPs in Asia.
- CCAC invited IGES to give presentation on SLCP regional assessment for Asia at COP 20 in Lima, Peru.
- Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (FAR) cites the IGES book on transport co-benefits in Asia.
- World Health Organization (WHO) mainstreams SLCPs into Asia Environmental and Health Ministers work plan.
- Beijing Normal University (BNU) invited IGES to join a series of lectures on climate change and air pollution in Asia.

## IPSS\_5: Sustainable Development Goals (SDGs)

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

[Major External Fund] ERTDF (MOEJ)

## <Major Achievements towards Impact Generation>

Launched flagship project on governance and SDGs and published a policy brief on an energy SDG and a water SDG; a discussion paper on regression analysis of MDGs achievement and governance; several commentaries; a new interview feature. These publications have been shared with various stakeholders such as negotiators, UN and NGO staffs at the Post 2015 Development Agenda negotiations and the side events and raised their awareness on SDGs.

- IRF published and promoted the IGES SDG policy brief on energy on their website and IGES policy proposals have been widely promoted.
- Society for Environmental Economics and Policy Studies (SEEPs) conference accepted IGES paper on bottom up energy governance and SDG
- Asahi Shimbun Publications accepted a peer reviewed paper on SDG and biodiversity.
- German magazine entitled Development + Cooperation (D+C) accepted IGES article on SDGs.

- Translated and publicly promoted the Open Working Group (OWG) outcome document and the UNSG's Synthesis Report on the IGES website
- Drafted a commentary on UN Secretary General's Synthesis Report on the IGES SDGs webpage and raised awareness on SDGs.

NOTE: Outputs with this task overlap with task 1.

## 7. Sustainable Cities (Kitakyushu Urban Centre)

Kitakyushu Urban Centre (KUC) aims to be a leading research institution on local sustainable city policies in the region by researching such practical and effective policies and activities and disseminating them. Main activities in FY2014 included low-carbon project development and capacity building support for low-carbon action plans and resilient city planning, supporting policy formulation and project implementation for efficient use of local resources, facilitating networking and collaboration among partners, and collaboration with local partners in Kitakyushu City.

## <FY2014 Major Achievement (Outcomes and Impacts)>

- Development of low-carbon action plans in selected six cities including Surabaya (Indonesia), Hai Phong and Ho Chi Minh City (Viet Nam), Nonthaburi and Phitsanulok (Thailand) and Cebu (the Philippines).
- Development of national strategic plan for food waste management in Malaysia, 3R strategies in Viet Nam and solid waste management plans in Nairobi, Kenya.
- 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.

## KUC\_1: Integrative Local Governance to Develop "Smart Cities"

The task focused on low-carbon project development and formulation of the supporting policies, including resilient city policies to support the transformation into more resilient and sustainable places, in cooperation with selected cities. Major components in FY2014 were:

- Research on low-carbon projects and supporting policies particularly in management of energy and solid waste
- (2) Capacity building support for measuring greenhouse gas (GHG) emissions from the public sector and designing policies and projects to reduce them
- (3) Research on policies to transform the design of cities to be more resilient against natural disasters and climate change-associated risks

[Major External Fund] MOEJ, ERTDF/MOEJ, Japan International Cooperation Agency (JICA), Kitakyushu City

## <Major Achievements towards Impact Generation>

- Selection of low-carbon projects in Surabaya, Indonesia, in the energy and solid waste management sectors for Joint Crediting Mechanism (JCM) application in cooperation with Kitakyushu City Government and private companies. Identification of similar projects in Hai Phong, Viet Nam, in three sectors including energy, solid waste management and conservation of Cat Ba Island.
- Assistance in the development of low-carbon action plans in six cities (Surabaya, Indonesia; Hai Phong and Ho Chi Min City, Viet Nam; Nonthaburi and Phitsanulok, Thailand; and Cebu, the Philippines).
- Shared the achievements and constraints for JCM project development through intercity cooperation by organising JCM workshops in Yokohama in July and October by inviting six cities from Japan and ten cities

from abroad as the secretariat.

- Contribution to capacity building of a total of more than 40 trainees from eight countries by organising a three-week JICA Training Course on Nationally Appropriate Mitigation Actions/Measure, Report and Verify (NAMA/MRV) (low-carbon city planning) Capacity Building in Kitakyushu for consecutive three years.
- Contribution to raising awareness of relevant city officials and other stakeholders for resilient city development by summarising ongoing resilient policies and activities in four cities (Cebu, the Philippines; Shanghai, China; Nonthaburi, Thailand; and Ho Chi Minh City, Viet Nam).

## KUC\_2: Initiatives led by Eco Model Cities

The task focused on practical approaches for improving local environmental problems by using local resources efficiently covering the sectors on solid waste management, water supply, wastewater treatment, environment monitoring, transport management, parks and forests management, city planning and involvement of relevant stakeholders. Major components in FY2014 were:

- (1) Research on effective policies and measures for efficient use of local resources
- (2) Contribution to project implementation led by local governments and other relevant stakeholders including private companies

[Major External Fund] MOEJ, JICA, Kitakyushu City

## <Major Achievements towards Impact Generation>

- Contribution to the development of a national strategic plan for food waste management in Malaysia in cooperation with the National Solid Waste Management Department, Ministry of Urban Wellbeing, Housing and Local Government by formulating a food waste management data collection guideline and start collecting the data from selected private companies.
- Contribution to the design of 3R strategies in Viet Nam, particularly in drafting guidelines for municipal solid waste management and construction and management of incineration facilities.
- Contribution to the designing of solid waste collection zones including high and low income areas in Nairobi, Kenya, by tendering the first zone in view of expanding it to the entire city.
- Assistance to Kitakyushu City Government in promoting private companies' environmental technologies and management systems overseas, particularly on e-waste and plastic waste management system in Cebu, the Philippines, and on-site water purification system in Surabaya, Indonesia.
- Contribution to identifying appropriate strategies for reducing short-lived pollutants from the municipal waste management sector by carrying out city assessments in Surabaya, Indonesia and Cebu, the Philippines under the Climate and Clean Air Coalition (CCAC)-Municipal Solid Waste Initiative (MSWI) project.
- Contribution to designing a cooperation project with the Ministry of Energy and Mines, Lao PDR, through conducting a JICA feasibility study on application of a biochar production method using biomass waste from dam construction for income generation for resettling residents.

## KUC\_3: Networking Eco Model Cities and Good Practice Replication

The task focused on networking with local and national governments and relevant organisations in the region by maintaining and expanding existing networks for information and knowledge sharing on sustainable cities and fostering future collaboration. Major components in FY2014 were:

- (1) 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 by coordinating relevant ministries in the region
- (2) Management of the ASEAN ESC Model Cities Programme funded by the Japan ASEAN Integration Fund (JAIF) which was developed from the recommendation of the 1st High Level Seminar on Environmentally Sustainable Cities

## [Major External Fund] MOEJ, JAIF, Kitakyushu City

## <Major Achievements towards Impact Generation>

- Contribution to the knowledge sharing and facilitation of inter-organisational cooperation for environmentally sustainable cities development in the region by serving as the secretariat of the 6<sup>th</sup> High Level Seminar on ESC in Johor Bahru, Malaysia on 9-10 February 2015 which brought together about 240 participants from national governments, local authorities, international organisations, non-government organisations (NGOs), research institutions, private companies and others (the event was held back-to-back with the FutureCity Initiative International Forum organised by Japan's Cabinet Office and Cabinet Secretariat).
- Contribution to mutual learning and replication of activities toward ESC development by sharing relevant information through implementing the 2<sup>nd</sup> year activities of the ASEAN ESC Model Cities Programme in 20 cities in eight countries.

## KUC\_4: Collaboration with Partners in Kitakyushu

KUC collaborated with Kitakyushu City Government and other local partners in promoting sustainable city policies and activities within the city as well as overseas. Some of these activities overlapped with the activities listed in tasks 1-3.

## [Major External Fund] Kitakyushu City

## <Major Achievements towards Impact Generation>

- Contribution to raising awareness of university students in Kitakyushu City for designing a sustainable city by supporting NPO Satoyama in organising the 2<sup>nd</sup> Sustainable Design Forum in Higashida Area.
- Contribution to raising awareness of primary school students in waste separation and resource circulation by developing a composting manual for children and organising a training session in cooperation with Kyushu Institute of Technology (KIT).
- Contribution to capacity building of students and trainees by lecturing at local universities and JICA training courses on solid waste management and low-carbon city policies including the support for the Kitakyushu Techno-Cooperative Association (KITA) managing these training courses

## 8. Strategic Research Activities at the IGES Regional Centre

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

## <FY2014 Major Achievement (Outcomes and Impacts)>

• Provided key stakeholders, especially government officials with contributions to their capacity development on climate change adaptation and environment impact assessment issues through workshops/conferences and

web-based knowledge-sharing.

• Contributed to additional activities such as preparation of the United Nations Environment Programme (UNEP)'s sixth edition of Global Environment Outlook (GEO6) and hosting the United Nations Framework Convention on Climate Change (UNFCCC) Regional Collaboration Centre in the coming year.

## BRC\_1: Networking and Capacity Development in Climate Change Adaptation

The BRC aimed to increase networking with climate change adaptation practitioners globally and in the Asia-Pacific through the Asia Pacific Adaptation Network (APAN) Regional Hub and promote capacity development through workshops/conferences and web-based knowledge sharing in close collaboration with the US Agency for International Development (USAID) Asia Pacific Climate Change Adaptation Project Preparation Facility (USAID Adapt Asia-Pacific). Major components in FY2014 were:

(1) Knowledge Generation

Produced and compiled the knowledge and lessons needed for climate change policy makers including climate change adaptation mainstreaming to national development plans in collaboration with partners of APAN and USAID Adapt Asia-Pacific.

(2) Knowledge Management and Sharing

Upgraded and strengthened web-based knowledge-sharing portals, including the expanded climate change adaptation technology database, and conducted community of practice on climate change finance.

(3) Capacity Building

APAN organised the fourth Climate Change Adaptation Forum, the largest climate change adaptation-specific conference in the Asia and the Pacific (about 500 participants from 50 coutnries) in October 2014 in Malaysia with support from the Malaysian Government and many supporting institutes and APAN partner organizations. APAN also organised a dozen workshops and conferences with its partner organisations in the region. USAID Adapt Asia-Pacific organised the third annual forum in Siem Reap in September in close collaboration with the United Nations Development Programme (UNDP) and other key agencies in the region.

(4) Networking and outreach with other networks and initiatives

APAN organised a side event at COP 20 and expanded its network with participating organisations.

[Major External Fund] UNEP, US Agency for International Development (USAID), MOEJ

## <Major Achievements towards Impact Generation>

- Web-based knowledge sharing portals were upgraded and strengthened. A monthly average of APAN website users is over 9,000, and APAN's regular newsletters were circulated to over 5,000 subscribers.
- APAN contributed to capacity development of over 600 government officials and other stakeholders in total through its regional forum and workshops in FY2014. The USAID Adapt Asia-Pacific second annual forum contributed to capacity development of about 100 participants.

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

BRC aimed to increase networking with practitioners engaging in environmental safeguards, environmental compliance and enforcement, and sustainable development through the operation of the Asian Environmental Compliance and Enforcement Network (AECEN) and Network for Integrated Planning and Sustainable

Development Strategies in Asia-Pacific Region (SDplanNet-AP) and contributed to capacity development through knowledge-sharing and conducting twinning projects. Major components in FY2013 were:

(1) Environment Impact Assessment (EIA) :

AECEN continued to develop the database of environmental laws and regulations, literature and news articles from AECEN member countries. AECEN also organised a workshop on environmental performance assessment in ASEAN held in Bangkok inviting experts from selected ASEAN countries, the ASEAN Secretariat, OECD, Korea and Japan and co-organised a workshop on the theme of public participation in EIA process held in Bangkok with the USAID Mekong Partnership for the Environment (USADI-MPE) project. In addition, AECEN contributed to the EIA in Asia Workshop held in Tokyo and conducted a case study on EIA in Thailand with support from the Ministry of the Environment of Japan. AECEN completed two twinning projects on EIA capacity strengthening (Sri Lanka - Japan and Lao PDR - Japan).

- (2) Case study on waste management at the city level:
   BRC conducted case studies in selected Asian cities and identified major challenges in implementation.
- (3) Information and knowledge sharing on sustainable development: SDplanNet-AP organised a regional workshop in Incheon as part of the series of Regional Sustainable Development Transition workshop organised with the United Nations Office for Sustainable Development (UNOSD), IISD and other key organisations, and continued to share news and other knowledge products.
- (4) Others:

Contributed to the preparation of United Nations Environment Programme (UNEP) Sixth Global Environment Outlook (GEO6).

[Major External Fund] MOEJ, USAID, UNOSD, IISD, UNEP

#### <FY2014 Major Achievement (Outcomes and Impacts)>

• Contributed to the capacity development of government officials in charge of implementing EIA, national environment/social safeguard systems and/or sustainable development.

#### **BRC\_3: Networking and Outreach**

BRC played a leading role in networking with overseas organisations especially those based in Bangkok, Thailand and its neighbouring countries, and explored possible opportunities for collaboration. BRC assisted the Programme Management Office (PMO) and other Areas in conducting various IGES-wide activities, fund raising, and IGES-wide outreach and knowledge management. BRC continued piloting a community of practice ('Evening Café') to strengthen outreach and increase partnerships with key stakeholders in Bangkok.

#### <Major Achievements towards Impact Generation>

• Added new partners and initiated dialogues with new partners for possible collaboration.

# 9. Strategic Research Activities at Beijing Office

IGES Beijing Office aims to serve as an important bridge and a reliable platform between China and Japan to further promote environmental bilateral cooperation between the two countries. Specifically, the Beijing Office will contribute to promoting bilateral cooperation at the national level in the areas of environment.

#### <FY2014 Major Achievement (Outcomes and Impacts)>

- Construction of three model facilities was completed in Shandong province, Sichuan province and Zhejiang province in China. These model facilities were designed to reduce the total pollutants such as ammonia nitrogen. IGES, with cooperation from Ministry of the Environment, Government of Japan (MOEJ) and Ministry of Environmental Protection, the People's Republic of China (MEP), constructed the facilities and implemented test operation and monitoring. (However, test operation has not been completed with some facilities because of delay in construction of pipelines, which the Chinese local governments were responsible for.) IGES finished all the tasks as expected and handed over the three facilities to the local governments through MOEJ on 23 March, 2015.
- Awareness for the need of climate change adaptation and climate change options has been raised among those who are in charge of making decisions in China. IGES, with cooperation from MOEJ and National Development and Reform Commission (NDRC), planned and implemented a training course on low carbon society for members of NDRC and local Development and Reform Commission (DRC).
- Ten local governments in Japan started communication and cooperation with respective Chinese counterpart local governments on air quality management. In order to materialise these communication and cooperation, IGES provided substantive support and promoted communication and information exchange between local governments in Japan and China. IGES also provided support in organising training courses in Japan and in dispatching experts to China. In March 2015, a Memorandum of Understanding (MOU) was concluded to promote cooperation and communication between the central governments.

# BJG\_1: Promotion of bilateral cooperation between Japan and China in the areas of environment

Beijing Office contributed 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. The overview of the project is as follows.

- Test operation and monitoring of wastewater treatment model facilities in rural areas in China, which were constructed in FY2012-FY2013.
- Construction of a new wastewater treatment model facility in Jiaxing city, Zhejiang province.
- Smooth promotion of cooperation between local governments in Japan and China to improve air quality in China as the platform organization
- Capacity building of representatives from low-carbon model cities in China (implementation of training courses in Japan)

[Major External Fund] Lump-sum contract and commissioned contract from MOEJ

#### <Major Achievements towards Impact Generation>

<u>Cooperation project on reduction of total pollutants such as ammonia nitrogen etc. in rural areas in China</u>
 Construction of three model facilities was completed in Shandong province, Sichuan province and Zhejiang province in China. These model facilities were designed to reduce the total pollutants such as ammonia nitrogen. IGES, with cooperation from MOEJ and MEP, constructed the facilities and implemented test operation and monitoring. (However, test operation has not been completed with some facilities because of delay in construction of pipelines, which the Chinese local governments were responsible for.) IGES finished all the

tasks as expected and handed over the three facilities to the local governments through MOEJ on 23 March, 2015.

• Japan-China inter-city cooperation project for improving air quality in China

Ten local governments in Japan started communication and cooperation with respective Chinese counterpart local governments on air quality management. In order to materialise this communication and cooperation, IGES provided substantive support and promoted communication and information exchange between local governments in Japan and China. IGES also provided support in organising training courses in Japan and in dispatching experts to China. In March 2015, an MOU was concluded to promote cooperation and communication between the central governments.

- <u>Capacity building for low-carbon model cities in China</u> Awareness for the need of climate change adaptation and climate change options has been raised among those who are in charge of making decisions in China. IGES, with cooperation from MOEJ and NDRC, planned and implemented a training course on low carbon society for members of NDRC and local DRC.
- <u>Participation in Japan-China joint research in the areas of environment (cooperation project at national level)</u> Beijing Office submitted a policy report to MEP China and MOEJ on wastewater treatment for stockbreeding, which will be one of the most important issues in the next 5-Year-Plan in China. Beijing Office also proposed a concrete plan for Japan-China joint research. As a result, it was decided between the governments of both countries that a joint research, which is based on the proposal made by IGES, will start from FY2015.

# III. Strategic Operations

Aiming to achieve institution-wide targets, PMO leads in promoting IGES strategic research and impact formation. In FY2014, PMO carried out IGES-wide strategic planning and coordination, and proceeded with comprehensive operations such as knowledge management, capacity development, quality management, networking, outreach, and fund raising in order to make timely and effective inputs into important policy processes.

# 1. Strategic Planning and Coordination of Overall Research Activities

The PMO develops and facilitates an overall research strategy for IGES, from an integrative perspective. In FY2014, the IT-based Milestone Management System was developed and started its operation, in collaboration with the Human Resource Management Section and the Accounting Section, for steady implementation and progress review of the strategic plan. Monthly Senior Staff Meeting (MSS) convening the top management and senior staff members including Area Leaders and Senior Coordinators were further utilised for coordinating and facilitating integrative implementation of research activities.

#### <FY2014 Major Achievements>

- Supported Area/Task level strategic planning for structural goal setting (impacts, outcomes and outputs/activities)
- As a part of the IGES-wide strategic planning, PMO carried out and coordinated exercise on preparation of IGES Medium- to Long-Term Strategy and built the basis for comprehensive draft..
- Equipped with the Strategic Research Fund and Strategic Operation Fund with the aim of mobilising necessary resources, both human and financial, for emerging research and operational needs.

• The 'IGES Top Achievements Awards' was launched as an incentive mechanism to encourage staff efforts in impact generation.

# 2. Production of Flagship Products

PMO cooperated with each Area Leader to conduct planning and coordination of key IGES flagship products, including the White Paper, a publication which delivers key messages on timely and strategic topics in the Asia-Pacific region to contribute to important regional and international processes. A pre-launch event of the IGES White Paper V was held at ISAP 2014 and a printed edition will be published in summer 2015, considering ASEAN integration scheduled for 2015. In addition, the other two flagship initiatives on climate change and the sustainable development goals (SDGs) were started in 2014 and both of them will launch synthesis reports at ISAP in July 2015.

#### <FY2014 Major Achievements>

- White Paper V: Pre-launch session at ISAP2014 was held in July 2014 with sharing executive summary. Outreach at relevant policy process was carried out: including OECD regional workshop on trade and environment and the ASEAN+3 Environmental Ministers Meeting.
- Flagship initiative on SDGs: Generated diverse outputs include: two Policy Briefs, two discussion/working papers, one opinion article, one article in an international magazine, three commentaries, submissions to high-level UN meetings, and several interviews. As a result of active publishing, outreach and networking, IGES is increasingly recognised as a leading knowledge provider on the SDGs in the Asia Pacific region. A clear indication of this is the growing number of invitations that IGES receives participate in SDGs-related meetings, to write and contribute to papers, and to provide expert opinion.
- Flagship initiative on Climate: Issued two discussion/working papers, three commentaries and one interview. Through these outputs, IGES contributed to enhance discussions on the post 2020 framework and upgrading ambition of INDCs at the UNFCCC processes.

# 3. Knowledge Management

Knowledge management aims to provide the support capacities needed for IGES researchers to fully optimise their roles and responsibilities. It also aims to encourage an institutional culture where knowledge production is highly valued, and where appropriate infrastructure allows for a greater accumulation of institutional expertise and business intelligence. To achieve these objectives, operations first targeted further development of systems for knowledge creation, accumulation, management and utilisation across the institute. Second, operations continued to strengthen management and dissemination of IGES products and publications in line with our output database, external databases, and capacity development tools and products.

#### <FY2014 Major Achievements>

- Assessment of long-term knowledge management needs conducted, and multi-year operational plan established.
- Plans for the enhancement of external databases and development of a good practice database completed.
- New dissemination mechanism for IGES publications established as part of JSTOR "Sustainability" collection.
- New EBSCO linker procured for improved access to journal collections.

• Guidelines and procedures for knowledge production and dissemination improved, and assessment & survey of additional needs conducted.

# 4. Capacity Development

In FY2014, Capacity Development continued its dual focus on strengthening operations across the institution for provision of capacity development programmes and products to target key stakeholders both domestically and overseas, as well as an internal focus on building the capacity of IGES staff members to conduct high-impact and innovative policy research. External capacity development operations focussed on the design and delivery of multiple training programmes, while also working to strengthening IGES's relationship with key capacity providers in the region. Internally, operations continued to build staff capacity on effective research methods and strategic approaches for innovative research and effective dissemination/influence. Additionally, on-going development of opportunities for staff exchange, partnerships, collaborative research, and continuing professional development were further encouraged.

### <FY2014 Major Achievements>

- Coordination of two sessions for ADB's Asia Leadership Programme for 2015.
- Development of course contents and materials for TGO CITC course on Low-Carbon Development for local practitioners.
- E-learning product on Community-based Governance Standard in the Forest Sector created (i.e. two training videos).
- Partnership with UNU-FLORES to establish a regional Nexus Observatory in Asia. First preparatory workshop of the regional consortium held at IGES, and academic session held at the Dresden Nexus Conference.
- Coordinated two sessions of manager training and three sessions of research training for IGES staff.
- Staff exchange under the Kakehashi Japan-US (Fullbright) programme sent two staff to the US for a 7-day study tour.

# 5. Quality Management of Research Outputs

In FY2014, PMO provided proactive facilitation which included research methodologies in the early stages of output preparation towards improvement of the quality of final products

#### <FY2014 Major Achievements>

- Established a sound basis for conducting reviews of publications with useful feedback and timely approval, including review criteria.
- Conducted training sessions relating to the publication policy, research process, and other quality management related issues.
- Developed materials to assist researchers in publication planning including a concept note form, explanation of the Publication Policy, and explanation of the publication process.
- Conducted reviews of selected research outputs, publication proposals, and funding proposals.

# 6. Networking

Under this operation, planning and implementation of an integral networking strategy, including relationship-building with partner institutions and participation in key forums, is expected to be carried out. In

FY2014, coordination was strengthened for multiple international and regional networking operations such as Low Carbon Society Research Network (LCS-RNet), Low Carbon Asia Research Network (LoCARNet) and Asia-Pacific Adaptation Network (APAN), Asian Environmental Compliance and Enforcement Network (AECEN), Asia-Europe Environment Forum (ENVForum), Regional 3R Forum in Asia, and Asian Co-benefits Partnership (APC) in which IGES research projects are involved. In addition, the Sixth International Forum for Sustainable Asia and the Pacific (ISAP2014) was organised in July 2014, focusing on how Asia can implement sustainable development under resource constraints to stimulate policy discussions with key stakeholders, both domestic and international.

#### <FY2014 Major Achievements>

- ISAP2014 "Bringing Regional Voices to the Post-2015 Development Agenda" was held in Yokohama, Japan on 23-24 July, attended by about 930 participants including speakers and facilitating networking among stakeholders.
- IGES concluded/updated memorandums of understanding (MoUs) with organisations, which will become a
  basis to strengthen research and also to increase IGES's impact generation capacity through the partnerships.
  Those organisations include: Yokohama City, ICLEI World, United Nations Environment Programme, and
  Asian Development Bank..

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

Forming low-carbon societies requires widespread transition spanning the spectrum from technical innovation to social system reform. In order to promote such a transition in an integrative and efficient manner, it is essential to have a venue bringing together a wide range of research, and to promote exchanging information and sharing knowledge. IGES hosts the secretariats of two research networks meeting these needs: the International Research Network for Low Carbon Societies (LCS-RNet) and the Low Carbon Asia Research Network (LoCARNet).

In the past fiscal year, the networks have tried hard to set opportunities to advance ongoing capacity building activities for researchers and research institutes in Asia, knowledge sharing within the region, and policy dialogue between researchers and policymakers by conducting annual meetings and various meetings/workshops. Also, the networks have supported research institutes to be independent, so that they will form a "Centre of Excellence" coalition leading Asia on low-carbon development with their full ownership.

Also, in response to a proposal that more efforts should be focused on impact generation for both domestic and international policies, the networks established a goal to make proposals to COP21, and conducted concrete process towards COP21.

**[Major External Fund]** Ministry of the Environment, Japan (MOEJ), Mizuho Research Institute Ltd (MHIR), Japan International Cooperation Agencies (JICA)

#### <Major Achievements towards Impact Generation>

- One point of last fiscal year's activities worthy of special mention is the LoCARNet Bogor Declaration made at the LoCARNet 3rd Annual Meeting, which announced to the world that "Asia Is Ready to Stabilise Climate".
- LoCARNet organised a policy dialogue in Cambodia. Cambodian policymakers have come to recognise the
  necessity of the involvement of researchers in-country in policymaking. At first, based on an idea that Cambodia
  should foster and organise research community in-country, the establishment of "LoCAR-Net in Cambodia"
  was proposed.

- AIM researcher from Thailand cooperated with Thailand's Office of Natural Resources and Environmental Policy and Planning (ONEP) to examine Thailand's INDC (Intended Nationally Determined Contributions) targets using the AIM end-use model.
- Support provided to the Universiti Teknologi Malaysia (UTM) and Bogor Agricultural University (Indonesia) in fiscal year 2013 led to consistency in policy formulation support in the fields of low-carbon cities and adaptation respectively, as both move in the direction of autonomy.
- Viet Nam's Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE) has launched a variety of information exchange and public education campaigns targeted at the country's local governments and industries and aimed at greater promotion of low-carbon policy.

# 7. Outreach

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

# 7-1 Information Dissemination through Publications and Periodicals

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

### <FY2014 Major Achievements>

- In June 2014 the Annual Report of FY2013 was issued. In addition to the early publication time, by bringing together highlights from research activities in a compact form, the report was used and distributed using a wide range of opportunities, including public events.
- The e-mail news "E-alert" (11 editions: no. 242-252, which provided the latest trends and outputs of the research in a timely manner.
- In collaboration with the International Institute for Sustainable Development (IISD), IGES translated part of the Earth Negotiations Bulletin (ENB) related to climate negotiation including COP20 jointly with the Global Industrial and Social Progress Research Institute (GISPRI).
- Draft communication guideline was developed (to be finalised in FY2015)

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

Responding to the request of some domestic donors to increase IGES's visibility in Japan, a special web page for the Japanese general public was launched in FY2014. To strengthen its function as a portal for collecting and providing information on events and environmental information in the dynamic Asia-Pacific region, IGES continued to improve its web-site by effective information dissemination though the various databases managed by IGES, and by introducing the international and regional initiatives and activities in which IGES takes part.

#### <FY2014 Major Achievements>

• An attempt at search engine optimisation (SEO) was started to navigate potential readers to information provided by the IGES website.

- Collaboration for the flagship on SDGs and Climate Change: New web-site for each flagship project has been created.
- New column on the web "Climate Updates" was launched targeted at Japanese stakeholders.

# 7-3 Information Dissemination through Seminars and Symposia

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

### <FY2014 Major Achievements>

- Post-COP20 Seminar "Results and Prospects of COP20 Lima Meeting made pathways toward the 2015 agreement" held in Tokyo on 25 December 2014, which welcomed about 200 participants. Key outcomes of UNFCCC-COP20 were introduced by IGES researchers in a timely manner to Japanese experts, business, and the general public. (in collaboration with Climate and Energy Area (CE) and Natural Resources and Ecosystem Services Area (NRE)).
- To commemorate the 50th anniversary of Japan's membership of OECD, the Ministry of the Environment, Japan, OECD and IGES organised a symposium "Japan-OECD Symposium on the Environment: Towards a Sustainable Society in Asia" was organised in June 2014 in Yokohama.
- PMO-Outreach team provided logistical support to 10 seminars/symposiums conducted by different IGES research area.

### 7-4 Media Relations

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

#### <FY2014 Major Achievements>

- Collaborated with GE-Biz team to promote "Green Gift" proposal and J-CLP activities to target stakeholders. The attempt has been succefully implemented – more coverage on J-CLP including a high profile interview of J-CLP and Green Gift included in government plan.
- Nine press releases for IGES activities and five press releases for J-CLP activities were created and distributed to key media.

# 8. External Funding

In FY2014, IGES was successful in acquiring JPY2.1 billion in external funds, which is about JPY280 million more than previous fiscal year.

As a main trend in the increase in external funding, special attention must be given to the large increase in the funds from Energy Special Account of the Ministry of the Environment, Japan (MOEJ), including the projects for city-to-city collaboration. As a result, MOEJ related funds occupy a large part of external funds with about 90% of projects.

IGES also acquired a certain amount of funding from non-Japanese sources, such as international organisations and donor agencies including ASEAN Secretariat, Asian Development Bank (ADB), Clean Air AsiaCAA, International Institute for Sustainable Development (IISD), UN Environment Programme (UNEP), and US Agency for

International Development (USAID), by strengthening linkages with and bolstering its credibility with them. *NOTE: Chapter I: Overview states further details about external funding status.* 

# 9. Contributions to Local Communities and other activities

# 9-1 Contributions to Local Communities

IGES carried out educational programmes that target local residents in cooperation with local governments and related organisations, so that the knowledge obtained through research activities and research was given back to the community, as well as promoting and facilitating a better understanding of IGES' research activities among the local community.

### <FY2014 Achievements>

- Co-organisation of the "Shonan Village Academia" in September with Kanagawa International Foundation
- Participation in the "Shonan Village Festival" in May sponsored by Shonan Village Inc).
- Cooperation in environmentally educational programmes, such as "Global Environment Event: Agenda Day 2014" in May sponsored by Kanagawa Committee for Promotion of Protecting Global Environment, and a training course on improving the skills of Kanagawa prefecture's environmental education leaders in July, as well as in other events implemented by local government and NPOs, targeting local residents.
- Cooperation in school education of the municipalities that IGES headquarters and offices are located. In FY2014, the Hayama Headquarters accepted students from two local public junior high schools (in November).

# 9-2 Management of affiliate membership organisations

IGES runs an affiliate members system to make use of a diverse range of opinions in its research activities, by promoting cooperation and coordination with various entities that recognise the importance of global environmental issues and endorse the activities of the institute, such as governments, businesses, educational institutions, NGOs, NPOs and citizens. IGES also hopes that this affiliate members system acts as a bridge to widen the circle of support for and understanding of IGES. The number of Affiliate members as of 1 April, 2015 are set out in the following table:

	Membership
Foundations/Companies	17(0)
NGO	1 (0)
Individual members	39(0)
Students	3(-4)
Total	60(-14)

Note) Figures in brackets ( ) shows difference compared to last year's figure.

# IV. Business on Special Accounts

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

The role of the Technical Support Unit (TSU) is to support the Intergovernmental Panel on Climate Change (IPCC)

Task Force on National Greenhouse Gas Inventories (TFI). The TFI has the following aims:

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

The TSU implemented the following components in FY2014.

# 1-1 Dissemination and translation of two TFI Methodology Reports published in FY2013

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

- Dissemination of these Methodology Reports on various occasions such as the 40<sup>th</sup> Session of the Subsidiary Bodies of the UNFCCC in June 2014 and at the 20<sup>th</sup> Session of the Conference of the Parties to the UNFCCC in December 2014
- Support to the IPCC Secretariat in producing hard-cover prints of these Methodology Reports
- Support to the IPCC Secretariat in translating these Methodology Reports into five non-English UN languages

### **1-2 Technical Assessment of IPCC Inventory Guidelines**

This component aims to assess where science and data availability have developed sufficiently since the 2006 *IPCC Guidelines for National Greenhouse Gas Inventories* to support the refinement or development of methodological advice for specific categories and gases, with a view to identifying any specific areas or issues to be prioritized. Another aim is to conduct technical assessment on cross-sectoral issues, including improvement of user-friendliness of other inventory tools with a view to contributing to capacity development programmes. In FY2014, the following activity was implemented:

• Conducting an on-line questionnaire survey from 30 January to 27 February 2015.

# 1-3 IPCC Emission Factor Database (EFDB)

This component aims to maintain and improve a database of emission factors and other parameters for development of national GHG inventories where national experts can find nationally appropriate values to supplement the IPCC inventory guidelines. In FY2014, the following activities were implemented:

- Research and identification of potential data for approval by Editorial Board.
- Support of data management and data approval process.
- Organisation of the twelfth meeting of the EFDB Editorial Board at the Headquarters of Food and Agriculture Organization of the United Nations (FAO) in Rome, Italy on 10-12 November 2014.
- Organisation of 9<sup>th</sup> Data Meeting at the Headquarters of FAO in Rome, Italy on 11-12 November 2014, focusing on Agriculture, Forestry and Other Land Use (AFOLU) Sector.
- Organisation of 10<sup>th</sup> Data Meeting as an Expert Meeting on Emerging Activities to Combat Climate Change jointly with the FAO and the International Fund for Agricultural Development (IFAD) to discuss use of FAO data and IPCC GHG Inventory Guidelines for agriculture and land use, at the Headquarters of FAO in Rome, Italy on 13-14 November 2014.

• Provision of technical support to users on request.

## **1-4 IPCC Inventory Software**

This component aims to improve and upgrade the IPCC Inventory Software, the initial version of which was released in May 2012, and to support users of this software. This software implements the 2006 IPCC Guidelines for estimation of emissions and removals of greenhouse gases. In FY2014, the following activities were implemented:

- Rectification of bugs and errors detected.
- Provision of technical support to users on request.

### 1-5 International Expert Meetings on Greenhouse Gas Inventories and Other Events

This component aims to organise IPCC expert meetings on inventory-related topics and publish their results. In addition, this component aims to publicise the TFI activities. In FY2014, the following activities were implemented:

- Organisation of IPCC Expert Meeting on Application of 2006 IPCC Guidelines to Other Areas in Sofia, Bulgaria on 1-3 July 2014.
- Organisation of IPCC Expert Meeting on Systematic Assessment of TFI Products in Ottawa, Canada on 25-27 August 2014.
- Organisation of IPCC Expert Meeting to Collect EFDB and Software Users' Feedback in Hayama, Japan on 14-16 October 2014.
- Holding an open symposium entitled "New scientific findings on climate change and the importance of GHG inventory to assess mitigation progress" in Naha, Japan on 16 March 2015.
- Organisation of IPCC Expert Meeting to Collect EFDB and Software Users' Feedback in Naha, Japan on 17-19 March 2015.
- Publication and dissemination of results of earlier meetings.

# 1-6 Support to the Bureau of the TFI

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

• Holding the 26th meeting of the Bureau of the TFI in Ottawa, Canada on 28-29 August 2014.

# 1-7 Collaboration with other organisations

This component aims to collaborate with other organisations on inventory-related matters. The TSU continued contributing to inventory-related capacity building programmes implemented by other organisations such as United Nations Development Programme (UNDP), National Institute for Environmental Studies (NIES), Japan International Cooperation Agency (JICA), International Partnership on Mitigation and MRV, and Greenhouse Gas Inventory & Research Center of Korea (GIR) through participation in their meetings, delivering presentations, providing opportunities for hands-on exercise on the Software and distribution of inventory-related materials developed by the IPCC TFI by TSU staff. In addition, the TSU contributed to other international meetings and symposiums related to GHG emissions/removals by providing presentations and serving as keynote speakers (e.g. 7th International Symposium on Non-CO2 Greenhouse Gases (NCGG7) held in Amsterdam, the Netherlands on 5-7 November 2014).

#### **1-8 Inventory Internship Programme**

This component aims to provide young scientists with the opportunity to get familiarised with the IPCC work on methodologies for national greenhouse gas inventories, as well as to contribute to the work of TSU through applied studies in relevant inventory-related science. In FY 2014, two interns worked under this programme.

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

Asia-Pacific Network for Global Change Research (APN) is an inter-governmental network whose mission is to foster global change research in the Asia-Pacific region, increase developing country participation in that research and to strengthen interactions between the science community and decision-makers. In order to support collaborative researches and build on the capacity of scientists in the fields of global change research, especially in developing countries, APN has conducted the following activities in FY2014:

#### 2-1 Core Activities related to Global Change through Competitive Calls for Proposals

- (1) <u>Support of research projects, selected through the Annual Regional Call for Proposals (ARCP)</u> APN supported international research projects selected by the 19th Inter-Governmental Meeting (IGM).
- (2) <u>CAPaBLE Programme (Scientific Capacity Building and Enhancement for Sustainable Development</u> in Developing Countries)

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

#### **2-2 Focused Activities**

#### (1) Climate Adaptation Framework

APN provided support to a number of projects related to research and capacity development to enhance adaptation activities in APN developing countries, in collaboration with other relevant organisations, such as United Nations University (UNU), Asia-Pacific Adaptation Network (APAN), and Asia Pacific Forum on Loss and Damage.

#### (2) Low Carbon Initiative Framework

In late 2012, APN additionally launched a special call for proposal related to low carbon development ("Low Carbon Initiative Framework"). In FY2014, APN continuously provided support to selected projects under this framework.

#### 2-3 APN 3rd Strategic Phase Report and 4th Strategic Plan

A comprehensive review of the activities conducted by the APN during its 3rd Strategic Phase (FY2010-2014) was compiled in the 3<sup>rd</sup> Strategic Phase Report. Holding a workshop of key APN members, including the Task Committee, a draft strategic plan was created based on the outputs of the 3SP report, as well as in consideration of the developments in the area of global environmental change. The plan was finalised and adopted as the APN 4<sup>th</sup> Strategic Plan at the 20th Inter-Governmental Meeting.

#### 2-4 Science-Policy Linkages

In order to advance interactions between the science community and decision-makers, APN held the Science-Policy

dialogue, in which policymakers (nFPs) and scientists (SPGs) from several south asian countries shared information from each side and investigated the possibilities to interact each other, in Thimphu, Bhutan. Additionally, APN participated in UNFCCC/SBSTA, IPBES, and other science-policy related meetings to disseminate outcomes from recent APN activities.

### 2-5 Hyogo Activities

APN conducted the following Hyogo activities in FY2014 with Hyogo Prefectural Government (Hyogo) which has been providing financial and personnel support to APN Secretariat.

(1) International Expert Meeting on Air Pollution Control in Urban Asia-Pacific

APN, Hyogo and Beijing Normal University Zhuhai Campus co-organised an international meeting on air pollution control in Urban Asia-Pacific, in Zhuhai, Guangdong, China, which is the friendly province of Hyogo. In the meeting, scientists, policy makers and practitioners exchanged findings of their cutting-edge research and countermeasures, and explored problems and gaps to be solved.

(2) International SATOYAMA Symposium

APN and Hyogo co-organised an international symposium on SATOYAMA with support from UNU/International Partnership for the Satoyama Initiative (IPSI) in Takarazuka, Hyogo.

### 2-6 Inter-Governmental Meeting and Other Meetings

APN held the 20th Inter-Governmental Meeting and the Scientific Planning Group (SPG) Meeting in Kathmandu, Nepal, from 25-27 March 2015.

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

JISE primarily carries out practical surveys and research to restore and regenerate ecosystems and biodiversity from local to global levels aiming to realise societies based on sustainable development from the perspective of plant ecology. JISE also promotes a variety of projects, including training and information collection/provision related to regeneration of forests and ecology.

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

In FY2014, on the international front, JISE received a grant from the Aeon Foundation to conduct research on regeneration of tropical rainforests. Vegetation surveys and tree-planting activities and guidance were carried out in Kenya, Cambodia and Indonesia. Likewise research on plant communities in the rain-green forest of Thailand was advanced within the research project on potential natural vegetation in Asia and the Pacific. Further, surveys on vegetation and use of plants aimed at control of forest degradation in Lao PDR were carried out within research on the structure, dynamics and assessment of regional ecosystems. The results of wide-area natural vegetation surveys conducted in FY2013 in Kenya and neighboring countries were released at meetings of the International Association for Vegetation Science (September) and the Society of Vegetation Science (October).

On the domestic front, a myriad of research projects were advanced based on grants from the Toyota Foundation and the New Technology Development Foundation. A comparative study on indigenous plant communities on the Izu Peninsula and Kozushima of the Izu Islands was carried out within vegetation science research to contribute to the protection of biodiversity. A study was conducted on the growth of the "Great Forest Seawall," that was planted as part of research on assessment and recognition of vegetation resources, and a paper on the results of the Pacific coast Japanese beech forest regeneration project (Hakone, Kanagawa) was published, for which there are few precedents. In the research project initiated as an urgent topic from 2011 on restoration of the tsunami control forest for recovery after the Great East Japan Earthquake, surveys were continued on potential natural vegetation and the successional processes which form the basis for planting of the "Great Forest Seawall" in tsunami-affected areas. Outcomes were reported at the Society of Vegetation Science. Other activities included nation-wide forest regeneration projects and the investigative research that forms the bases for these projects, in Akita, Shizuoka, Ehime, Kochi, Saitama and Oita Prefectures based on collaboration among private companies, local governments and non-profit organisations. Research results for both domestic and international research projects were presented at various academic conferences, as well as in the research journal. Information was also disseminated to the general public at forums and through newsletters.

### 3-2 Capacity Building

As a capacity-building project for environmental preservation, JISE carried out a series of lectures and outdoor environmental study programmes for the general public. Likewise, in addition to the beginner-level ecological training that was reinstated in FY2013, intermediate-level training was also conducted. Outcomes of capacity-building were presented at a meeting of the Japanese Society of Environmental Education (August) on the topic of the role of studying wild plants in satoyama experience activities.

### **3-3 Interaction**

JISE also engaged in active exchange and public awareness campaigns, including holding its Environmental Forum 2015 on "Forest regeneration from the citizen's point of view" in February.

#### 3-4 Dissemination and Public Awareness

JISE disseminates news of its activities through its public relations activities which introduces its own activities as well as the efforts of private companies in environmental conservation. JISE also publishes "Eco-Habitat: JISE research", a bulletin containing both internal and external research results, as well as via online data with Citation Information by National Institute of Informatics (CiNii). It also planned and implemented a tour in Cambodia to carry out forest restoration overseas (August).

# V. Institutional Organisation

# 1. Meetings of the Boards of Directors and Trustees

In accordance with the Articles of Incorporation, regular meetings of the Board of Directors and the Board of Trustees were held as follows.

• The 5th Meeting of the Board of Directors

Date:	12 June 2014 (Thu)
Venue:	Headquarters of IGES
Principal agenda items:	Resolution advising approval of the draft FY2013 Business Report and the draft
	FY2013 Settlement Statement of IGES

IGES Medium-to-Long-Term Strategy Collaborating centres with international organisations Matters for consultation at the Board of Trustees Meeting

• The 6th Meeting of the Board of Directors

Date:	20 February 2015 (Fri)			
Venue:	Headquarters of IGES			
Principal agenda items:	Resolution advising approval of the draft FY2015 Business Plan and the draft			
	FY2015 Budget of IGES			
	Co-location with ICLEI Japan			
	Remuneration of a Director with full-time responsibilities (President)			
	IGES Medium-to-Long-Term Strategy			
	Collaborating centres with international organisations			
	Inter-Governmental Science Policy Platform on Biodiversity and Ecosystem Services			
	Technical Support Unit (IPBES-TSU)			
	Revisions to the Labour Contract Act of Japan			
	Relocation of the IGES Tokyo Office			
	Matters for consultation at the Board of Trustees Meeting and others			

- The Extraordinary Meeting of the Board of Directors (1st for FY2014) (A decision in writing) Date of resolution: 7 July 2014 (Mon) Matters for Resolution: Election of Representative Director and Operating Director Appointment of Secretary-General
- The Extraordinary Meeting of the Board of Directors (2nd for FY2014) (A decision in writing)
   Date of resolution: 18 December 2014 (Thu)
   Matters for Resolution: Convening of an extraordinary meeting of the Board of Trustees of IGES in February 2015
- The Extraordinary Meeting of the Board of Directors (3rd for FY2014) (A decision in writing) Date of resolution: 27 January 2015 (Tue) Matters for Resolution: Relocation of Tokyo Office
- The Extraordinary Meeting of the Board of Directors (4th for FY2014) (A decision in writing)
   Date of resolution: 31 March 2015 (Tue)
   Matters for Resolution: The formulation and amendment of Regulations for Management of IGES

•	The 5th Meeting of the Board of Trustees				
	Date:	28 June 2014 (Sat)			
	Venue: Headquarters of the Institute for Global Environmental Strategies				
	Principal agenda items:	Approval of the draft FY2013 Business Report and the draft FY2013 Settlement			

Statement of IGES Election of the members of the Board of Directors of IGES IGES Medium-to-Long Term Strategy Collaborating centres with international organisations

• The 6th Meeting of the Board of Trustees

Date:	21 February 2015 (Sat)
Venue:	Headquarters of IGES
Principal agenda items:	Resolution on approval of the draft FY2015 Business Plan and the draft FY2015
	Budget of IGES
	IGES Medium-to-Long-Term Strategy
	Collaborating centres with international organisations
	Inter-Governmental Science Policy Platform on Biodiversity and Ecosystem Services
	Technical Support Unit (IPBES-TSU)
	Revisions to the Labour Contract Law of Japan
	Relocation of the IGES Tokyo Office

# 2. Senior Staff Meetings (MSS)

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

# 3. Research and Secretariat staff

Personnel (as of 31 March 2015)

			(Short term)	(Non-Japanese)
	Strategic Research Project	90	14	40
Research Employees	Other projects (formerly Special Account)	16	1	7
	General Administration	30	13	3
Administrative Employees	Research Support	36	16	4
Employees	Special Account	9	4	0
Total		181		

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