



2017

July 2017-June 2018

Annual Report



IGES Institute for Global
Environmental Strategies



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Foreword

“We must work together with a diverse array of stakeholders to co-design pathways to sustainable societies and to build a common vision.”

The Institute for Global Environmental Strategies (IGES) was established under an initiative of the Japanese government in 1998 with the support of Kanagawa Prefecture. Since 2012, IGES has been conducting practical policy research as a public interest incorporated foundation, aiming to realise sustainable development in the Asia-Pacific region.

During FY2017 (July 2017 – June 2018) highlighted in this annual report, IGES reached a milestone of its 20th anniversary and embarked on the 7th Phase Integrative Strategic Research Programme, that will span the coming four years. We will continue to actively input effective policy recommendations into policy formation processes and international debate through a wide range of research activities on urgent global challenges, such as climate change mitigation and adaptation, creation of a sound material cycle society and circular economy, and conservation of biodiversity.

A variety of initiatives are underway in the international community to implement the two historic agreements concluded in 2015—the Paris Agreement and the 2030 Agenda for Sustainable Development that includes the Sustainable Development Goals (SDGs). However, it should be noted that there is a large gap between these initiatives and the actions required for a transformation to sustainable societies. If we are to accelerate these initiatives, we must effect major changes in our values, societal norms and lifestyles overall. Likewise, we must work together with a diverse array of stakeholders to co-design pathways to sustainable societies and to build a common vision.

IGES will continue to advance policy research that appropriately responds to dynamically evolving global trends as we work together with national and local governments, international organisations, universities, research institutes, businesses, NGOs and local communities to co-produce knowledge and fulfill our role as a change agent in facilitating the transformation to sustainable societies.

Finally, I would like to request your continued understanding and support for IGES research activities.



President, IGES
Kazuhiko Takeuchi

“IGES has encouraged the mainstreaming and acceleration of initiatives carried out by various stakeholders geared to building sustainable societies.”

In FY2017, IGES embarked on its 7th Phase Integrative Strategic Research Programme (July 2017 – June 2021). IGES has renewed its research framework, and, with coordination by the Strategic Management Office, will continue to engage in practical research activities in the three issue areas of Climate and Energy, Natural Resources and Ecosystem Services, and Sustainable Consumption and Production, with its two functional centres for Strategic and Quantitative Analysis and Sustainability Governance, three stakeholder taskforces on City, Finance, and Business, and satellite offices.

In FY2017, IGES released the outcomes of a series of cross-cutting flagship research projects on the effective implementation of the Paris Agreement and the Sustainable Development Goals (SDGs), targeting policy formation processes and international debate in a timely manner. Through cooperation with networks and platforms engaging in global issues, such as climate change and the SDGs, sustainable consumption and production, and biodiversity, as well as dynamic outreach activities including translation into Japanese of a book on planetary boundaries, IGES has encouraged the mainstreaming and acceleration of initiatives carried out by various stakeholders geared to building sustainable societies. Moreover, the annual International Forum for Sustainable Asia and the Pacific (ISAP) was held for the 10th time this year. Based on IGES findings, diverse participants from Japan and around the world engaged in discussions on topics included the sound implementation of the Paris Agreement and the SDGs, as well as ways to scale up actions and partnerships toward transforming social and economic systems with sustainability at their core.

Going forward, IGES will strive to conduct research activities keeping abreast of trends in the Asia-Pacific region and around the world, and disseminate policy recommendations and solutions to contribute to creating sustainable societies.



Executive Director, IGES
Hideyuki Mori

Outline of IGES



Mission of IGES

The Asia-Pacific region has seen rapid economic development and an accompanying intensification of environmental problems. In light of this, achieving a balance between environmental and developmental goals is a pressing issue, and the mapping of paths to sustainable societies that operate in harmony with nature is required. While maintaining cooperative relationships with a wide array of stakeholders including national and local governments, international organisations, universities, research institutes, businesses and NGOs, IGES intends to form strategies to achieve sustainable societies and to contribute to policy formulation based on the needs of the Asia-Pacific region.

Research Activities

IGES embarked on its 7th Phase Integrative Strategic Research Programme (July 2017–June 2021) in FY2017. Hinged upon the coordination of the Strategic Management Office, IGES will engage in policy research for problem-solving in the three issue areas of Climate and Energy, Natural Resources and Ecosystem Services, and Sustainable Consumption and Production, with its two functional centres for Strategic and Quantitative Analysis and Sustainability Governance, three stakeholder taskforces on City, Finance, and Business, as well as at its domestic and overseas satellite offices.

FY2017 Organisational Chart



Research Highlights in FY2017

July 2017-June 2018

By collaborating with a diverse range of stakeholders, IGES is working towards the goal of impact generation to accelerate the transformation to a sustainable society. In FY2017, IGES embarked upon its 7th Phase Integrative Strategic Research Programme and established key targets for impact generation with 25 cases of high level influence annually. Out of these 25 cases for FY2017, 10 cases are outlined below.

1

Materialisation of GHG Emission Reductions through Implementation of the JCM

The Climate and Energy Area contributed to implementation of the Joint Crediting Mechanism (JCM) which appropriately evaluates contributions to GHG emission reductions or removals from Japan in a quantitative manner, and uses them to achieve Japan's emission reduction target. In FY2017, the Area supported the development of 19 MRV (monitoring, reporting and verification) methodologies, the submission of 40 requests for official registration of projects and nine requests for credits issuance for actual JCM projects to

the Joint Committees between Japan and the partner countries. These projects are expected to generate approximately 2.1 million tCO₂ in emission reductions by 2030.

2

Pilot Research Project on Participatory Watershed Management in the Philippines Selected as Winner of Dubai International Award

A Pilot Research Project on Participatory Watershed Management in the Philippines carried out by the Natural Resources and Ecosystem Services Area was selected as a winner of the "Dubai International Award for Best Practices to Improve the Living Environment". This contributed to the improvement of land-use policies by local governments to ensure better resilience in the face of natural disasters and climate change. This project incorporated inputs from local governments into GIS (geographic information system) models, and based on the GIS modelling results, contributed to comprehensive land-use plans and local climate change action plans. Also, this project was extended to two other

places in the Philippines - the Los Baños and Pila-Victoria Sub-watersheds.

3

Contributions to Strategy and Action Plan on Waste Management in Myanmar

The Sustainable Consumption and Production Area worked with the government of Myanmar to improve waste management in Myanmar. Strategies and action plans at both the national and city level were officially adopted by the Ministry of Natural Resources and Environmental Conservation (MONREC) and the Mandalay City Development Committee (MCDC).

4

Launch of New Consortium "SWITCH-Asia" on Sustainable Consumption and Production (SCP)

In collaboration with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and

adelphi, IGES hosts the SWITCH-Asia SCP Facility, a part of the EU's flagship international cooperation programme on SCP. In so doing, IGES is increasingly being recognised as a primary institution working in the field of SCP in Asia and the Pacific.

The new SWITCH-Asia SCP Facility participated in three side events at the 2018 High-Level Political Forum (HLPF) on Sustainable Development held in New York. Further to these activities, IGES's SCP Area helped to organise two official side-events at HLPF. IGES co-organised one of the side-events entitled "SCP in Asia and the Pacific for Accelerated Achievement of SDGs" together with the Governments of Indonesia, Japan, Thailand, and UNESCAP.

5 Development of On-line SDG Interlinkages Analysis and Visualisation Tool

The Strategic and Quantitative Analysis Centre developed the SDG Interlinkages Analysis and Visualisation Tool. This tool aims to support integrated policymaking in nine Asian countries by

analysing the synergies and trade-offs between the SDG targets. The Tool has been widely accessed by users from 115 countries and used by various stakeholders. By using the SDG interlinkage tool, the Centre has initiated consultation with the government of Bangladesh to provide science-based evidence for the country's priority setting and institutional arrangements for SDGs implementation.

6 Provision of One-stop Solutions for Challenges Faced by Cities

The Sustainability Governance Centre and the City Taskforce provided one-stop solutions to Semarang and Bandung cities in Indonesia to formulate city-wide policies and sectoral action plans. In practical terms, Semarang city committed to retrofit the buses into Compressed Natural Gas (CNG) ones for public transportation, thereby contributing to the introduction of a pilot project to reduce GHG emissions. In six communities in Bandung, IGES conducted pilot projects to improve waste management practices.

7 Contribution to the Formulation of Shimokawa 2030 Vision

Shimokawa Town in Hokkaido has been highly evaluated as one of the leading municipalities implementing the Sustainable Development Goals (SDGs), and in December 2017, the town received the Prime Minister's Award of the 1st Japan SDGs Award created by the SDGs Promotion Headquarters. The City Taskforce collaborated with Shimokawa Town to contribute to formulate its 2030 Vision (SDGs Vision) and to develop SDGs indicators to objectively evaluate the degree of progress towards sustainable urban development in Shimokawa.

In addition, the City Taskforce collaborated with not only Shimokawa Town, but also Toyama City (Toyama Prefecture) and Kitakyushu City (Fukuoka Prefecture), all of which were selected as "SDGs Future Cities" by the Japanese government in June 2018, and developed three "Sustainable Development Goals (SDGs) Reports" respectively. The three reports comprise some of the first SDG reports carried out by local governments anywhere in the world, and were launched at the High-Level Political Forum (HLPF) on Sustainable Development held in New

York. Also, these reports were introduced by ICLEI – Local Governments for Sustainability on the very first page of their newsletter, and broadcasted to 1,500 member cities and regional networks.

8

Contribution to Expanding the Proactive Business Coalition Developing Momentum for Decarbonisation

The Business Taskforce served as Secretariat for, and contributed to the expansion of, the Japan Climate Leaders' Partnership (Japan-CLP), a proactive business coalition committed to reducing carbon emissions and developing momentum for decarbonisation. Japan-CLP has rapidly expanded in size during FY2017, with the number doubling from 37 to 79 members (as of June 2018). In cooperation with The Climate Group (a UK non-profit), Japan-CLP has supported membership applications of Japanese companies for international business initiatives such as RE100, EV100, and EP100*.

*For details, please see p. 24-25 (Business Taskforce)

9

Start of Japan-India Technology Matchmaking Platform (JITMAP)

In collaboration with The Energy and Resources Institute (TERI), the Kansai Research Centre initiated the Japan-India Technology Matchmaking Platform (JITMAP). This platform aims to promote the dissemination of Japanese low carbon technologies in India. In FY2017, four Indian companies adopted Japanese-made air compressors and/or best operating practices, thereby successfully matching Japanese technology providers with Indian end users.

10

Model Cities Programme Enhanced and Replicated in ASEAN

The Regional Centre implemented ASEAN Environmentally Sustainable Cities (ESC) Model Cities Programme, which provides technical assistance, seed funds, peer learning opportunities, awards and other incentives to cities who have demonstrated

outstanding performance and/or potential in local sustainable development. This strategy helps ASEAN create a pool of 'frontrunner' green cities to be early adopters of innovative sustainability practices and test-drive experimental policies, to eventually be scaled out through national and regional urban policies.

So far, the programme has supported 40 cities in eight ASEAN Member States over three phases since 2011. In FY2017, particular assistance was given to scaling up the national Model Cities programmes in Thailand and Philippines so that support could be given beyond two to three Model Cities per country. As a result, these two countries allocated extra domestic budget to support training and peer-to-peer networking targeting one Model City per province/region (i.e. about eight additional cities in both countries) as well as for bilateral exchange of experts between Filipino and Thai cities.

Research Highlights: Issue Research Areas

Climate and Energy Area

Outline

With particular focus on the Asia-Pacific region, IGES is carrying out initiatives to facilitate the transition to decarbonised societies at the national and local levels. Specifically, the Institute looks towards strengthening climate and energy-related strategies and policies, and engages in international climate negotiations, bilateral and multilateral cooperation, carbon pricing initiatives, market-based mechanisms, and the development and maintenance of databases.

Major Activities in FY2017

Operationalisation of the Paris Agreement

IGES made timely proposals regarding the “Paris

Rulebook” as well as presentations at international conferences. IGES has made submissions on the global stocktake under Article 14 of the Paris Agreement and the Talanoa Dialogue to the UNFCCC as an accredited research institution. Likewise, IGES proposed guidance on robust accounting under Article 6 and methods to ensure transparency in

the use of international market mechanisms under Article 13. IGES introduced these proposals to stakeholders and experts engaged in international negotiations at side events for COP23 and Subsidiary Body sessions, as well as at international workshops organised by IGES in Beijing, Delhi and Tokyo.

Materialisation of GHG Emission Reductions through Implementation of the JCM

IGES contributed to implementation of the Joint Crediting Mechanism (JCM) which appropriately evaluates contributions to GHG emission reductions or removals by Japan, and applies them toward achievement of Japan’s emission reduction target. IGES supported the development of 19 MRV (monitoring, reporting and verification) methodologies, and the submission of 40 requests



Regional knowledge sharing workshop on international market mechanisms and transparency under the Paris Agreement (Bangkok)



Japan-China policy research workshop (Beijing)



The JCM workshop on low carbon technologies for sustainable development (Phnom Penh)

for official registration of projects and 9 requests for credits issuance for actual JCM projects to the Joint Committees between Japan and partner countries. These projects are expected to generate approximately 2.1 million tCO₂ in emission reductions by 2030.

Impacts on Political and Social Debates on Carbon Pricing in Asia

Carbon pricing policy is taking shape in Asia, including the introduction of emissions trading schemes in China and Korea. IGES served as a focal point for implementing the Carbon Pricing Forum for Japan, China and Korea, and contributed to discussions on future cooperation. IGES also published reports and articles in newspapers and magazines on emissions trading schemes and carbon tax, thereby stimulating policy development.



Seminar on carbon markets and the Paris Agreement (Tokyo)

Climate Policy Development by Visualisation of Current Status

IGES engages in analysis and visualisation of climate policies around the world in order to facilitate the further development of such policies. For example, IGES published a report entitled, "IGES Climate Policies in the World" that summarised the climate policies of 13 countries. Likewise, IGES provides the most up-to-date information through the regular updating of IGES Climate Databases on various topics. Together with other eminent research institutions, IGES developed climate mitigation policy indicators for G20 countries and analysed the social and cultural aspects of energy transition in Japan and Germany. IGES also commented on world trends in the use of coal, including initiatives announced at COP23, receiving coverage in major newspapers in Japan.

Selected Publications

- "IGES Submission to the UNFCCC on the Global Stocktake for COP23"
- "IGES Submission to the Talanoa Dialogue of the UNFCCC"
- "Proposal for Guidance on Robust Accounting under Article 6 of the Paris Agreement"
- "International Market Mechanisms and Transparency"
- "Institutional Arrangements for Reporting the Use of Market Mechanisms under the Enhanced Transparency Framework to Avoid Double Counting"
- "The Joint Crediting Mechanism (JCM) at a Glance"
- "JCM in CHARTS" (Indonesia, Mongolia, Bangladesh, Cambodia and Laos)
- "JCM Proposed Methodologies"
- "IGES Joint Crediting Mechanism (JCM) Database"
- "The Latest Progress of Emissions Trading Schemes in Japan, China and the Republic of Korea"
- "The Climate Edge Vol. 27"
- "Flash Report on the Chinese Programme on Developing the Nation-wide Emissions Trading Market"
- "IGES Climate Policies in the World" (13 countries)
- "IGES NDC Database"
- "IGES GHG Emissions Database"
- "IGES Kyoto Units Transfer Database"
- "Japan-France Collaboration on Climate Change and Long-term Low Carbon Strategies"

Natural Resources and Ecosystem Services Area

Outline

IGES conducts problem-solving research activities on integrated natural resource management to promote the conservation and sustainable use of natural resources in the Asia-Pacific region, focusing on forest conservation, climate change adaptation, water resources management and biodiversity conservation.

Major Activities in FY2017

Pilot on Participatory Watershed Management

IGES carried out land-use mapping and hydrological modelling in a pilot research project aimed at climate-sensitive land-use in the Santa Rosa



Participatory land-use mapping in Pila-Victoria Sub-watershed, Lake Laguna (Philippines)

Watershed, Philippines. Project activities were also extended to the Los Baños and Pila-Victoria Sub-watersheds. The project was selected as a winner of the “Dubai International Award for Best Practices to Improve the Living Environment” for the year 2017.

REDD+

Through technical inputs and facilitation of discussions between Japan and partner countries, IGES made a major contribution towards finalising the JCM REDD+ guidelines for Cambodia and Viet Nam. These guidelines pave the way for implementation of JCM REDD+ projects in the respective countries. IGES also supported the Japan delegation at the UNFCCC COP23 and published briefing notes on the outcomes of REDD+ negotiations, as well as on the zero deforestation concept.

Using its Strategic Research Fund, IGES conducted a study on bilateral support mechanisms for REDD+, including the German REDD Early Movers Programme (REM). The study analysed constraints and opportunities for Japan to provide financial support to REDD+. IGES additionally conducted a review of Brazil’s climate change policies.

IPBES

Through authorship, facilitation and administrative support, IGES contributed to IPBES activities in

FY2017, particularly to the completion of the Asia Pacific Regional Assessment of Biodiversity and Ecosystem Services, and to facilitating the engagement of Japanese experts in IPBES.

Responsible Consumption and Production

As a member of the Responsible Asia Forestry and Trade (RAFT) partnership, IGES engaged in an array of activities, including: training and certification of forest management unit managers in Indonesia; testing of a low-cost timber drying kiln with local communities and trainings on GIS and timber processing to forestry officers in Lao PDR; and training of local farmers on teak woodlots in PNG. IGES also provided a presentation on “Options for Customs Collaboration to Combat Illegalities in Timber Trade” at the APEC Workshop on Customs Best Practices to Identify Illegal Timber and Wood Products, in August 2017. Also, under a contract with the Japan Forest Technology Association, IGES analysed policies and mechanisms for legality verification of wood and wood products in Peru and Mexico.

IGES has explored opportunities to promote Japan’s contribution to “zero deforestation”. Per a request from the Tokyo Organising Committee of the Olympic and Paralympic Games, IGES provided advice to the Committee on sourcing of wood



Biomass survey with Ugalingu community (PNG)

products and assisted in the arrangement of a meeting between the Committee and a plywood company from Sarawak, Malaysia.

Financial Inclusion and Climate Change Adaptation

Under the JICA project “Financial Inclusion for Disaster and Climate Resilient Households and Communities”, IGES completed surveys in Bangladesh, India and the Philippines on financial services for the low-income sector.

Satoyama-related Research Activities

IGES managed the Satoyama Development Mechanism and drafted the 3rd Satoyama Initiative Thematic Review and the Satoyama Development Mechanism 2017 Booklet. Under the GEF-Satoyama project, field studies on ecosystem values, indigenous and local knowledge, and governance were conducted in Colombia, Mauritius and Thailand.

Water Environment Partnership in Asia (WEPA)

IGES organised two sessions at the 8th World Water Forum to share information from WEPA activities and co-organised the WEPA Annual Meeting 2017 and WEPA International Workshop on Industrial Wastewater Management. Likewise, IGES designed the WEPA Action Programme to monitor the impact of industrial waste on groundwater quality in Sri Lanka, and drafted the WEPA Outlook 2018 and a WEPA policy brief on piggery wastewater management.



Showcasing WEPA activities at the 8th World Water Forum (Brazil)

Septage Management

Under the project “Integrated Approach for Dissemination of Decentralized Domestic Wastewater Treatment Systems in Southeast Asia”, IGES led research on systems for sludge collection and treatment in urban areas of Indonesia (Environment Research and Technology Development Fund).

Lake Conservation and Management

As a member of the SATREPS project “Establishment of Environmental Conservation Platform for Tonle Sap Lake, Cambodia”, IGES conducted a household survey of local lake users to inform policies and guidelines for lake management.

Landscapes and Livelihoods

Field studies were conducted in Thailand and PNG for the APN project, “Effective Models for Payment Mechanisms for Forest Ecosystem Services”, and in East Kalimantan on key factors affecting local livelihoods (Grants-in-aid for Scientific Research).

Water-energy-food Nexus and Urban-rural Nexus

IGES conducted a stakeholder survey and country workshops under the APN project “Water-energy-food Nexus Perspective: Path Making for SDGs to Country Actions in Asia”. Likewise, IGES carried out spatial analysis of water availability and water demand estimation for the APN project “Assessment of Climate-induced Long-term Water Availability in Ganges River Basin and Impacts on Energy Security in South Asia”. Also, a new project on the water-energy-food nexus was secured through the Belmont Forum (Japan Science and Technology Agency) in which IGES will be responsible for research at three locations in Japan.

Using the IGES Strategic Research Fund, stakeholder interviews, a field visit, and analysis of land-use change were conducted in a case study area in Dhaka for the project “Integrated Governance of Urban-rural Resource Flows for Enhanced Regional

Resilience”. IGES is also part of a consortium that made a successful proposal on urban-rural linkage to Japan Society for the Promotion of Science (JSPS)-DST (Department of Science and Technology, India) bilateral programme.

Science-policy Interfaces

Research was conducted on science-policy interfaces in Indonesia and Japan to identify potential areas for improvement, key lessons, and challenges (S-15 project).

Resilience, Finance and Risk

IGES made presentations on “Pathways for Building Resilience: Some Lessons Based on Research in Natural Resource Management” at the Sustainable

Development Transition Forum in November 2017. Likewise, a presentation on “Financial Innovations and their Efficacy for Risk Reduction” was given at the ADB conference on Community-based Disaster Risk Management and Adaptation in October 2017.

Biodiversity and Ecosystems Monitoring

One IGES researcher is monitoring wildlife diversity and population change in the Ashiu Experimental Forest of Kyoto University using 20 camera traps (JSPS).

Other Capacity Building Trainings

- IGES served as a lead trainer for the UNITAR disaster risk reduction training for women leaders in the Pacific.



Brainstorming on ideas for future research programmes

- Under the MOEJ Adaptation Initiative project, IGES conducted a regional workshop to enhance the capacity of government officers from 14 Asia-Pacific countries on national adaptation plans, focusing on moving from planning to practice.

Other Regional Assessments

- Two researchers contributed to the UNEP Global Environmental Outlook (GEO) for Youth publication.
- One researcher was the lead author of the scenario chapter for the Hindu Kush Himalayan Monitoring and Assessment Programme (HIMAP) evaluation report.

Selected Publications

- “Summary for Policymakers of the Regional Assessment Report on Biodiversity and Ecosystem Services for Asia and the Pacific of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services” (co-author)
- “Assessment of Wastewater and Manure Management from Pig Farms in Vietnam” and “Septage Management in the Urban Areas of Indonesia: Case Study in Bandung and Denpasar City” (proceedings of the International Water Association Conference)
- “Employing Crowdsourced Geographic Data and Multi-temporal/ Multi-sensor Satellite Imagery

to Monitor Land Cover Change: A Case Study in an Urbanizing Region of the Philippines” (Computers, Environment and Urban Systems)

- “Participatory Land-use Approach for Integrating Climate Change Adaptation and Mitigation into Basin-scale Local Planning” (Sustainable Cities and Society)
- “Quantitative Assessment of the Earth Observation Data and Methods Used to Generate Reference Emission Levels for REDD+” (Satellite Earth Observations and Their Impact on Society and Policy, Springer)
- “Governance Standard for Forest Sector Activities and Programmes in Nepal at the Community Forest Management Level” (pilot standard version 1.1)
- “Japan’s New Initiative for REDD+ Result-Based Finance: Its Opportunities and Challenges” (Global Environmental Research)
- Policy Brief “Improving Irrigation Water Use Efficiency Holds the Key to Tackling Water Scarcity in South Asia: Technical Potential and Financing Options”
- “Identifying Adaptation Effectiveness Indicators Using Participatory Approaches: A Case Study from the Gangetic Basin” (Climate and Development, co-author)
- “Benefits and Costs of Risk Insurance in Selected Countries of Asia” (APN Science Bulletin)
- “Estimating Animal Density Without Individual Recognition Using Information Derivable

Exclusively from Camera Traps” (Journal of Applied Ecology, co-author)

- “Trans-river Migration of Iban and Bekatan to the Tatau River Basin in Bintulu” (Ngingit, co-author)
- “WEPA Outlook on Water Environmental Management in Asia 2018” (Ministry of the Environment, Japan)

Research Highlights: Issue Research Areas

Sustainable Consumption and Production Area

Outline

IGES conducts policy analysis from the perspective of sustainable consumption and production (SCP) including environmentally-sound waste management in cities, formation of effective recycling systems with a view of Asia as a whole, and improvement in resource productivity. Likewise, IGES makes policy recommendations to stimulate lifestyle changes.

Major Activities in FY2017

Implementation and Promotion of Policy on SCP

Towards establishment and demonstration of SCP model cases, IGES performs a vital role in several international programmes under the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns (10YFP). IGES played a leading role in the development of a framework for assessing the impacts and scalability of projects on sustainable lifestyles and conducted the monitoring activities of projects under 10YFP. In addition, IGES played a prominent role in international surveys on a variety of related topics, including one on envisioning future lifestyles and policy tools and a global survey on SCP policies led by UNEP.

Recognition of IGES as a research hub on SCP policy research has gradually increased both at global and regional levels. For instance, in collaboration with GIZ and Adelphi, IGES now hosts the SWITCH-Asia SCP Facility, a part of the EU's flagship international cooperation programme on SCP, at the IGES Regional Centre. IGES is also a part of the S-16 (Environment Research and Technology Development Fund) research group working on one of four research themes as a leading organisation conducting policy research on the sufficiency approach.



Pilot project of 10YFP SLE project in Chile



S-16 Research group at 13th Asia Pacific Roundtable for SCP ©APRSCP 2017

Implementation and Promotion of Policy on the 3Rs

IGES continues to serve as a knowledge catalyst on resource efficiency and the 3R-related agenda in major international platforms. For example, in April 2018, the “State of the 3Rs in Asia and the Pacific” was published at the 8th Regional 3R Forum in Asia and the Pacific, held in Indore, India. Developed in coordination with a key expert panel of waste management specialists from across Asia, the report comprises an indicator-based assessment of 3R policies in 11 countries including Japan, China, India and Thailand, as well as the Pacific Island region. By utilising comparable measures for waste prevention, recycling, biomass utilisation, marine plastics prevention, and e-waste management, in line with Sustainable Development Goal 12 (Responsible Consumption and Production), the report presents a headline review of progress made on waste and resource efficiency throughout Asia and the Pacific, and defines nine concrete recommendations towards further improving waste management in the region. In addition to addressing emerging waste issues, such as marine pollution as viewed through the lens of various policy responses, this report

offers a cross-country examination and comparison of different waste categories and criteria illustrated through innovative data visualisation techniques. It is a must-read report for technical experts and practitioners interested in waste management, circular economy, and the current status of SDG 12 in Asian and Pacific countries.

In collaboration with the City of Yokohama, IGES has begun technical cooperation with Da Nang City (Viet Nam) to develop a source separation and collection plan for recyclables and model projects in selected wards.

IGES Centre Collaborating with UNEP on Environmental Technologies

IGES Centre Collaborating with UNEP on Environmental Technologies (CCET), hosted at the SCP Area of IGES, developed two national strategies (Myanmar: officially approved; Cambodia: draft finalised) and two city strategies (Mandalay: officially approved; Phnom Penh: draft strategy under modification) on waste management, and is also preparing one regional strategy for the Maldives. It has also started activities on technical

guidance on waste management technologies as well as on a South Asia Roadmap and Platform related to sustainable waste management.

Under the Municipal Solid Waste Initiative of the Climate and Clean Air Coalition (CCAC), CCET supported the Philippine Government in the development of a short-lived climate pollutant (SLCPs) reduction plan for the waste sector. Also, it successfully revised the SLCPs Emission Quantification Tool.



Sustainable waste management is must to achieve SDGs, climate and resource efficiency

Selected Publications

- “State of the 3Rs in Asia and the Pacific”
- Chapter 1.2 of “Environmental Local Government Whitepaper 2017-2018” (in Japanese)
- “Special Issue on OECD’s EPR Updated Guidance in Journal of Material Cycles and Waste Management” (in Japanese)
- “Waste Management Strategy and Action Plan for Mandalay City (2017-2030)”



Launching session for State of the 3Rs in Asia and the Pacific ©IISD/ENB

Research Highlights: Functional Centres

Strategic and Quantitative Analysis Centre

Outline

The Strategic and Quantitative Analysis Centre (QAC) functions as a hub to promote science-policy linkage for achieving sustainable development. It contributes in creating value-added knowledge through strategic research and quantitative policy assessment so as to provide practical policy recommendations, helping informed policymaking and problem-solving in developing countries in Asia and the Pacific and beyond. The Centre looks to support policy assessment at the regional, national and subnational levels by identifying appropriate indicators, and working on filling in the data gaps and data analysis. Work is also done on applying quantitative analysis tools and integrated assessment models to critical topics such as those covered by Sustainable Development Goals (SDGs), including SDG integration and policy coherence, water-energy-food nexus, low-carbon and green economy pathways, green investment and green jobs, climate policy, carbon pricing, trade and the environment in collaboration with key partners.

Major Activities in FY2017

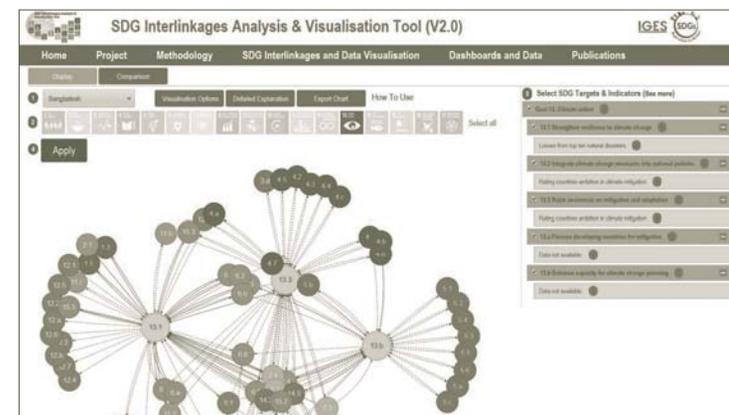
In FY2017, five research projects were conducted supported by the IGES Strategic Research Fund covering both areas of SDGs and climate change,

as well as a research project on water-energy nexus funded by the Asia-Pacific Network for Global Change Research (APN) and a couple of commissioned works through the collaborations with the World Bank and the United Nations University. In addition, substantial contributions were made to many projects conducted by other areas/units at IGES by providing the required technical support based on its capacity for conducting quantitative analysis and modelling work. Not limited to knowledge building based on scientific research, contributions were made in supporting policy changes shifting from those based on a siloed approach to more integrated policymaking through the development of innovative tools supporting informed policymaking and promotion of their applications through conducting country case studies and consultation with relevant national governments.

SDGs Related Research

One of the key activities in FY2017 in the area of SDGs is the development of the IGES SDG Interlinkages Analysis and Visualisation Tool, a free online tool supporting integrated policymaking for SDGs through the identification, quantification and visualisation of the interlinkages between SDG targets. The tool, covering nine Asian countries including Bangladesh, Cambodia, China, India,

Indonesia, Japan, Republic of Korea, the Philippines and Viet Nam, was first launched in July 2017. Version 2.0 of the tool was launched in July 2018 to enhance the user interface and adopt the global SDG indicators with relevant time-series data. After its launch in 2017, the tool has been accessed widely through internet around the world. Building upon an innovative methodology and scientific evidence based on statistical data, the tool and relevant IGES research report (Zhou and Moinuddin, 2017) was cited or featured in many policy documents or the website of relevant international organisations. It is included in the Toolboxes of the SDG Help Desk of UNESCAP (<https://sdghelpdesk.unescap.org/>)



IGES SDG Interlinkages Analysis & Visualisation Tool

toolboxes). IGES was invited to present the tool at many international events organised by relevant UN and international organisations, such as the Fifth Asia-Pacific Forum on Sustainable Development (APFSD), the Knowledge Sharing Workshop for Strengthening the Environment Dimensions of the SDGs in Asia and the Pacific and the Expert Group Meeting on Science, Technology and Innovation (STI) Roadmaps for the United Nations Interagency Task Team on STI for the SDGs (IATT).

Aside from gaining wide recognition, the tool has been used to support practical policymaking. The government of Bangladesh, represented by the Prime Minister's Office, has shown keen interest regarding the application of the tool to support integrated priority setting for SDG planning and implementation through the identification of the strategic targets in the network of the interlinkages and key synergies and trade-offs between SDG targets. By using the SDG interlinkages tool,

IGES provided preliminary results and policy recommendations to the government of Bangladesh to help validate the existing priority list of the government based on scientific evidence.

Climate Change Related Research

In the area of climate change, IGES contributed to knowledge-building related to the assessment of climate policy such as carbon pricing and the assessment of the Nationally Determined Contribution (NDC) and the long-term mitigation targets particular for Japan using various quantitative analysis approaches including factor decomposition analysis and the AIM-CGE model. The research results can help inform policymaking related to using market mechanism, various technology options and major factors influencing the achievements against the NDC and long-term mitigation targets. In addition, a case study was carried out in Bhutan to conceptualise low-carbon socioeconomic pathways at the sub-national level which can be duplicated in other cities in Asia in the future.

Selected Publications

- "IGES SDG Interlinkages Analysis and Visualisation Tool" (Version 2.0) <https://sdginterlinkages.iges.jp/visualisationtool.html>
- Research Report "Sustainable Development Goals Interlinkages and Network Analysis: A Practical Tool for SDG Integration and Policy Coherence"



SDG Interlinkages Tool displayed at APFSD (Bangkok)



SDG Interlinkages Tool at the Knowledge Sharing Workshop for Strengthening the Environment Dimensions of the SDGs in Asia and the Pacific (Bangkok)

Research Highlights: Functional Centres

Sustainability Governance Centre

Outline

IGES worked to promote forms of governance that can enable the integration of multiple development objectives into development plans under the Sustainable Development Goals (SDGs) and the Paris Agreement. Some of the work of the Sustainability Governance Centre (SGC) focused chiefly on how national governments, businesses and other actors can collaborate on the SDGs. An additional stream of research explored how cities can govern low carbon transitions. A third area of study focused on governance that can promote the co-benefits between climate change and other development priorities. In each of these project areas, the SGC provided timely recommendations on the governance reforms required to make links across issues and move down a sustainable low carbon development path in Asia.

Major Activities in FY2017

Sustainable Development Goals (SDGs)

IGES analysed the progress and challenges on the SDGs in Asia and advanced research on measures to facilitate SDG implementation. IGES worked closely with the Ministry of the Environment, Japan to organise stakeholders' meetings to share good practices of different stakeholders e.g. government

ministries, business and local municipalities to accelerate environment-related SDGs. At the International Forum for Sustainable Asia and the Pacific (ISAP) in July 2017, IGES convened a panel on the governance arrangements needed to advance different kinds of integrated solutions to climate change and other development priorities. This was followed by a well-attended Asian Development Bank workshop that IGES helped organise to strengthen the integration of the environment-related SDGs into development plans in countries outside Japan. Also on the SDGs, IGES published a report entitled, "SDGs and Business for the



Stakeholders' meeting on SDGs (Tokyo)



Future: Actions by Private Companies in Japan", that highlighted good practices and challenges to mainstreaming the SDGs into core business practices. This research was based on the results of questionnaires and numerous interviews with Japanese companies. In addition, IGES contributed to furthering understanding the SDGs through a capacity building programme targeting staff of overseas offices of the Japan International Cooperation Agency (JICA) in Asia.

City Support for Low Carbon Development

IGES worked with policymakers in the cities of Semarang, Indonesia to implement sustainable transports solutions, focusing on the city's bus rapid transit (BRT) system. The results of the three year programme was shared with national ministries and was disseminated through 100 Resilient Cities and



Co-benefits workshop on Indonesia's transport sector (Jakarta)

other networks. IGES also worked to support a social movement for appropriate waste management led under a Japanese and Indonesian city-to-city collaboration. Additionally, IGES conducted a joint study in Bogor on climate change and energy policy with the National Institute for Environmental Studies (NIES) and the Bogor Agricultural University. Focus group discussions were held with diverse stakeholders to discuss priority issues for the city's sustainable low-carbon development, such as a BRT system and environmentally sound buildings, and challenges to policy implementation were identified.



Low-carbon development programme as part of Bandung-Kawasaki cooperation (Kawasaki)

Co-benefits Approach in Asia

IGES, as the Secretariat of the Asian Co-benefits Partnership (ACP), published its third White Paper "Quantifying Co-benefits in Asia: Methods and Applications" highlighting the updates on co-benefits in international climate negotiations and describing the different tools and models that could be used to quantify co-benefits in cases from Asia. The publication helped identify relevant tools and data sources to measure reduction in GHGs and short-lived climate pollutants (SLCPs) as well

as to consider other benefits. Moreover, based on cooperation with international networks and partner organisations such as the Asia Pacific Clean Air Partnership (APCAP) and the Climate and Clean Air Coalition (CCAC) to reduce SLCPs, IGES carried out research activities to encourage policymakers to integrate climate change measures and development objectives. Responding to a request from the United Nations Environment Regional Office for Asia and the Pacific, IGES serves as the coordinating lead author of an assessment report on air pollution in Asia, which will be published in 2018.



Seminar on co-benefits (Hayama)

Selected Publications

- "SDGs and Business for the Future: Actions by Private Companies in Japan"
- "Asian Co-benefits Partnership White Paper 2018 Quantifying Co-benefits in Asia: Methods and Applications"
- "IGES Activities and Publications on the SDGs" and "IGES Recommendations and Main Messages on SDG Implementation"
- "Awareness Raising and Engaging High School Students in Transforming Trans Semarang BRT-Indonesia" and "Analysis of Pedestrianisation Programme in Developing Cities: A Case of Panca Trotoar in Bandung, Indonesia"
- "Interactions of Global Climate Institutions with National Energy Policies: An Analysis of the Climate Policy Landscape in China, India, Indonesia, and Japan" (The Routledge Handbook of Energy in Asia)
- "Performance Evaluation of Pedestrian Facilities from Pedestrian and Vehicular User Perspectives"
- "Tracing Sustainability Transitions in Seoul Governance: Enabling and Scaling Grassroots Innovations"

Research Highlights: Stakeholder Taskforces

City Taskforce

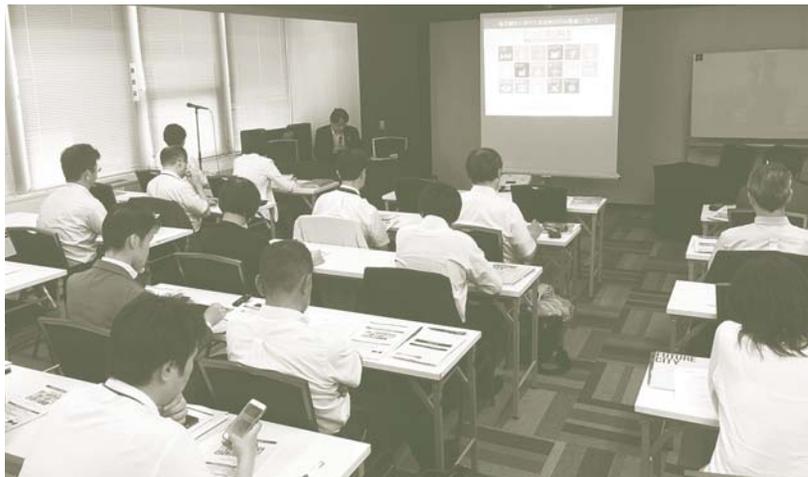
Outline

IGES co-creates solutions and promotes policies and strategies for low-carbon/carbon neutral, resilient and sustainable societies with stakeholders in Asian cities, including those in Japan. In collaboration with other regional and international organisations and networks, IGES facilitates the sharing of solutions and strategies among like-minded cities, and contributes to enhancing implementation capacity at the city level.

Major Activities in FY2017

Promotion and Support of Local Actions on SDGs
IGES produced a series of reports on the SDG-related actions of three cities, namely Shimokawa, Toyama, and Kitakyushu. The reports were presented at the High-Level Political Forum on Sustainable Development in New York in July 2018. For Shimokawa, IGES suggested SDG indicators based on micro-level data, including local inhabitant tax, for renewal of its master plan. In addition, a

proposal entitled, "ASEAN SDGs Frontrunner Cities Programme", prepared by IGES together with the Cambodian Government, was approved by the Japan-ASEAN Integration Fund (JAIF). This two-year programme will support ASEAN countries and cities in the planning and implementation of local SDG actions that are expected to become leading examples in Asia. As an information and knowledge platform on local SDGs, IGES supported the 9th East Asia Summit High-Level Seminar on Sustainable Cities organised in Siem Reap, Cambodia in March



Media seminar on SDGs report series (Tokyo)



High-Level Seminar on Sustainable Cities (Siem Reap)

2017 by the Ministry of the Environment, Japan (MOEJ), Ministry of Environment, Cambodia, ASEAN Working Group on Environmentally Sustainable Cities (ESC), and the ASEAN Secretariat. More than 250 participants from the region gathered at the seminar.



IGES-Shimokawa collaboration on SDGs

Support for Local Climate Strategy Development

IGES supports low-carbon policy development in Asian cities by providing low-carbon scenario development using AIM (Asia-Pacific Integrated Model). In FY2017, LCS scenarios were developed in Can Tho (Viet Nam), Semarang (Indonesia) and Phnom Penh (Cambodia). "Low Carbon Society Scenario Semarang 2030" was launched at COP23 side event in November 2017 in Bonn. A workshop was organised in Hai Phong (Viet Nam) in December 2017 to discuss ways to utilise AIM results in the

development of the city's climate change action plan. IGES, as the coordinator of whole programme and the focal point of Japan, started joint research development on China-Japan-Korea climate actions at the city level towards decarbonisation and sustainable development and organised COP23 side event. IGES also conducted activities to promote local low-carbon actions in Japan. Study group meetings were organised with the participation of about 40 key stakeholders at the IGES Tokyo Sustainability Forum, and included representatives from national and local government, experts/researchers and ICLEI Japan. Topics covered at the meetings included: a) data collection in the building sector, b) local PPS (power producers and suppliers), and c) new approaches such as local finance and behavioral science. A symposium on "Local Climate Actions towards 2 Degree Target" was organised in Tokyo in November 2017 to share outcomes of study group discussions.

Multi-benefit Activities

IGES has provided one-stop solutions to Bandung and Semarang to formulate city-wide policies and sectoral action plans. IGES has also translated policy recommendations into the practical level of low-carbon transport infrastructure and behavioural changes in society. As a result, Semarang city committed to have buses retrofitted into CNG buses to reduce emissions. Likewise, several communities in Bandung committed to improving waste management practices. A portion of our activities are facilitated through city-to-city collaboration between Indonesian and Japanese cities, namely Semarang-Toyama and Bandung-Kawasaki.

Selected Publications

- SDGs Report on Cities
 - "Kitakyushu City the Sustainable Development Goals Report 2018"
 - "Toyama City the Sustainable Development Goals Report 2018"
 - "Shimokawa Town the Sustainable Development Goals Report 2018"
- "Low Carbon Society Scenario Semarang 2030"
- Discussion Paper "Taking Action on the SDGs in Japanese Cities: The "FutureCity" Initiative and Its Achievement on the SDGs"
- "Low Carbon Paratransit in Jakarta, Indonesia: Using Econometric Models to Improve the Enabling Environment" (Case Studies on Transport Policy)
- "Exploring Influential Factors on Transition Process of Vehicle Ownership in Developing Asian City, A Case Study in Bogor City, Indonesia" (IEEE Explore Digital)
- "Does the Improvement of Pedestrian Facilities Increase Willingness to Walk? The Case of Bandung, Indonesia" (Compendium paper of the 97th Annual Meeting Transportation Research Board)

Finance Taskforce

Outline

Delivering on the SDGs and commitments under the Paris Agreement requires mobilising and shifting large amounts of public and private capital. To achieve low-carbon and climate resilient sustainable development, IGES is engaged in policy research and recommendations as well as capacity building. Specific areas of focus are responsible investment (e.g. ESG investment), financing options, financial disclosure on climate-related risks, responses to business opportunities, and financial flows related to SDGs.

Major Activities in FY2017

Good Practices Overseas in Green Bonds and Green Finance

IGES collected good practices in green bonds and green finance and prepared concise presentation materials that can be easily understood by stakeholders in Japan, on the following topics:

- Green bond guidelines, standards and indices
- Policy, regulation, incentives and finance modality for green bond enhancement
- Green bond listing, green covered bonds, green asset-backed securities and green sukuk

- Green lending by 3 banks including strategies, methodologies and performance
- ESG investment including divestment and engagement by 3 institutional investors including strategies, methodologies and performance
- Innovative green finance models

IGES undertook this effort as work commissioned by the Ministry of the Environment of Japan (MOEJ).

Green Bond Knowledge Platform

In April 2018, the MOEJ decided to set up the “Green Bond Knowledge Platform” to enhance the Japanese green bond market by sharing useful information with potential bond issuers, investors and other relevant stakeholders in Japan. The platform is expected to share information on trends in the green bond market both in Japan and overseas, case studies on green bonds, and policies and incentives in Japan to enhance the green bond market. IGES, serving as secretariat, is responsible for maintaining and updating the platform.

Preliminary Analysis on Sustainable Finance to Contribute to SDGs

IGES kicked off a preliminary review of the role that the financial system needs to play to deliver on SDGs and the Paris Agreement. Further work will explore

current trends and initiatives for mainstreaming sustainable finance into national and international financial systems, including enhanced disclosure of climate-related risks by companies and financial institutions, political leadership on sustainable finance and the role of long-term policy signals by governments.

Gap Analysis on GHG Emissions by TOPIX Companies under the 2 Degree Scenario

In collaboration with the 2 degrees investing



Workshop on results of equity market alignment report (Tokyo)

initiative (2°ii), a French research institute, and the Research Institute for Environmental Finance (RIEF), IGES published a report entitled, “Testing the Japanese Listed Equity Market Alignment with the 2°C Climate Goal”. It compares the energy and technology exposure of the Tokyo Stock Price Index (TOPIX) stock market index with the 2°C roadmap of the International Energy Agency (IEA). In collaboration with 2°ii, PRI Japan and RIEF, IGES held a workshop to present the results of the report. More than 50 stakeholders from companies and the financial sector were in attendance.

Support for the UNEP-FI 25th Anniversary Event

UNEP-FI hosted the Asia Pacific Regional Roundtable in December 2017 in Tokyo to celebrate its 25th anniversary and bring together the sustainable finance community to discuss pressing issues. At the event, discussions took place on the investor’s duty to integrate Environment, Social and Governance (ESG), policy interventions to drive green financial systems, and positive impact finance initiatives. IGES has been a partner institution of UNEP-FI since February 2017. Accordingly, IGES served on the secretariat for the event, providing advice on the event agenda and logistics, and participating as moderator of the session on environmental and social safeguards in international financing (Equator Principles).

Selected Publications

- Policy Brief “Strengthening the Integration of Climate Risks in the Banking Sector”
- Discussion Paper “Impact of Climate Change: Transforming Business Behaviour in favour of Sustainable Development”
- Policy Report “Testing the Japanese Equity Market Alignment with the 2°C Climate Goal”

Research Highlights: Stakeholder Taskforces

Business Taskforce

Outline

IGES has continued its activities to generate outcomes and impacts by supporting highly motivated businesses in Japan, specifically targeting the promotion of climate change and decarbonisation policies in businesses in Japan.

Major Activities in FY2017

Developing Momentum for Decarbonisation in Japanese Industry

As the secretariat of the Japan Climate Leaders' Partnership (Japan-CLP), a group for companies that develop and publish ambitious recommendations, IGES has proactively organised a total of 11 events, including dialogues with companies and investors outside Japan and the Japan-CLP delegation to COP23. Through these dialogues between Japan-CLP companies and overseas companies, as well as by delivering key information mainly to the Japanese industrial sector, IGES has contributed to developing a momentum for decarbonisation among businesses in Japan. In particular, IGES has provided key updates in a business context on the latest developments in climate change and trends overseas, particularly targeting the financial media in Japan. As a result, there have been about 80 articles



Dialogue between Christiana Figueres, Former Executive Secretary of UNFCCC, and Japan-CLP at COP23

published and a broadcast of "Impact of Revolution for Decarbonisation" on national television by the Japan Broadcasting Corporation (NHK), and this has contributed significantly to expanding awareness.

Expansion of the Corporate Network (Japan-CLP)

Japan-CLP has rapidly expanded in size during FY2017. Its 37 members as of the beginning of

FY2017 have grown to 79 members as of June 2018 (214% growth from the previous year).

Supporting Decarbonisation by Businesses

In cooperation with The Climate Group, IGES has supported the applications of Japanese companies for RE100, EV100, and EP100* memberships as the Japan-CLP secretariat. As a result, a total of 10 companies have newly joined RE100, EV100, and/

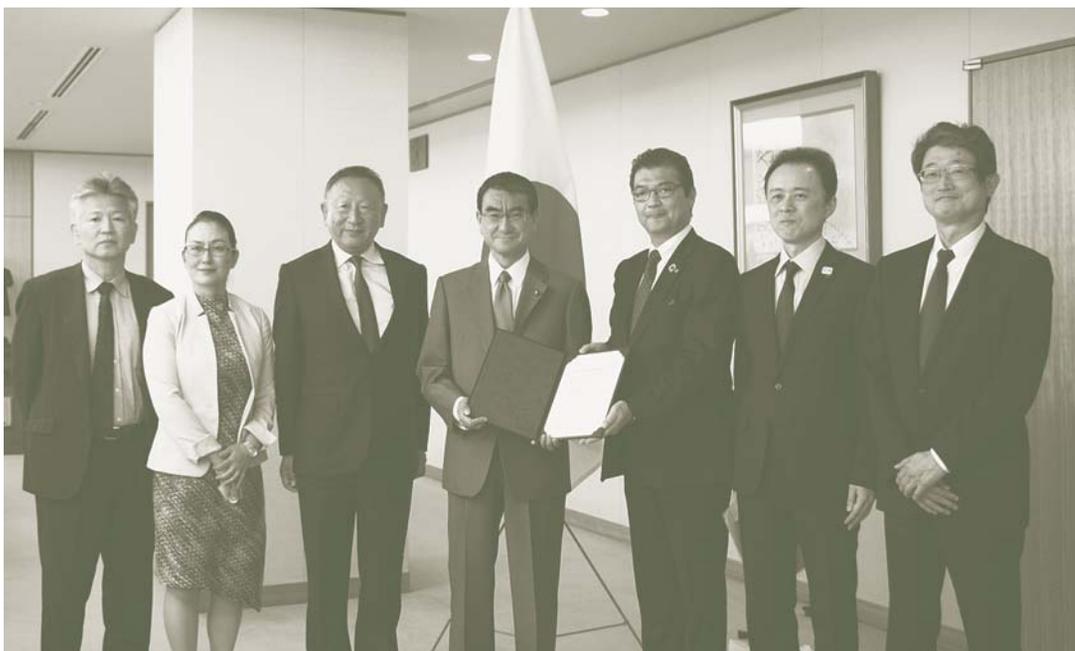
or EP100 initiatives, thereby accelerating efforts toward decarbonisation by businesses.

Policy Engagement

Japan-CLP has participated in the following committees that encourage recommendations for ambitious policy engagement from a corporate perspective: Subcommittee on Long-term Low-carbon Vision of the Central Environment Council (Ministry of the Environment), Policy Development Working Group of the Central Environment Council/Hearing on Revision of Basic Environment Plan

(Ministry of the Environment), and the Advisory Panel to the Foreign Minister on Climate Change (Ministry of Foreign Affairs).

In addition, Japan-CLP has conducted dialogues with the Minister of the Environment and the Minister of Foreign Affairs. Dialogue participants have communicated corporate efforts along with their strong motivation to decarbonise, calling for more ambitious deployment of policies. IGES has made various contributions including coordination of dialogues.



Dialogue between the Minister of Foreign Affairs and Japan-CLP

Selected Publications

- Commissioned Report “Research on Pioneering Efforts and Activities by Non-state Actors”
- Various position statements by Japan-CLP (Initiative is taken by Japan-CLP members, with the secretariat providing support)

*These are international business initiatives. RE100 is committed to 100% renewable power, working to massively increase corporate demand for and delivery of renewable energy. EV100 aims to drive the transition to electro-mobility. And EP100 is an initiative pledged to double the energy productivity of businesses.

Research Activity Facilities & Units

Activities at IGES Satellite Offices

○ Kansai Research Centre

Kansai Research Centre (KRC) carries out research focused on actions taken by the private sector, in particular businesses that promote environmental and energy conservation measures, under the theme of "Business and the Environment". Specifically, KRC contributes to actual reduction in greenhouse gas (GHG) emissions in developing countries by promoting the transfer and diffusion of low-carbon technologies (LCTs).

In FY2017, with support from the Ministry of the Environment of Japan (MOEJ) and Hyogo Prefecture, KRC conducted research activities mainly on three fronts in collaboration with other research groups within IGES, as well as leading regional and international organisations.

Japan-India Technology Matchmaking Platform (JITMAP) and Opportunities for Replication in Thailand

In collaboration with The Energy and Resources Institute (India) and the Thai ESCO Association, KRC matched Japanese companies with potential end-users in India and Thailand. Nine feasibility

studies (FS) for LCT application in India and four FS in Thailand were carried out in conjunction with Training of Trainers programmes for energy auditors and managers, consultation workshops for LCT applicability, and JITMAP dialogue meetings.

Based on these matchmaking activities, four Indian companies and one Thai company adopted Japanese-made compressed air and/or best operating practices. Business opportunities for other Japanese companies were created and are being discussed on a business-to-business basis.



On-site feasibility study for LCT application in India

Capacity Building for SIDS in Proposal Development for Renewable Energy Projects

With the continuous support of MOEJ and the International Renewable Energy Agency (IRENA), KRC organised the "Training Programme to Support

Renewable Energy Deployment through Developing Project Proposals to Access Green Climate Fund" in Japan and a follow-up workshop in Fiji. Participants from small island developing states (SIDS) were trained in ways to access the Green Climate Fund (GCF) in general and in completing actual GCF templates in particular.

Training programmes for SIDS substantially



In-house lecture and site visit (Hyogo Prefecture) of GCF training programme

enhanced the capacity of participants. Ten promising project ideas were identified and three concept notes were fully completed by the participants of Fiji, Maldives and Palau. While Fiji is currently discussing taking their concept note forward with the UN Environment, Maldives and Palau have requested KRC to provide further assistance towards finalising and submitting their concept notes to the GCF.

Dissemination of Research Findings

KRC researchers were invited to participate as experts, panelists and speakers in high-level events in Japan and overseas, including TEC15 meetings (Bonn), GCF internal capacity building (Seoul), UN Environment workshop (Paris), and the World Sustainable Development Summit (Delhi), among others. KRC's researchers also directly contributed to high-level events and discussions, especially those concerning UNFCCC technology and finance processes.



GCF capacity building programme (Seoul)

Selected Publications:

- Discussion Paper "Low Carbon Technology Transfer: Insights on Linking Phases and Matching Stakeholders"

- Commissioned Report "Technology Assessment Project for CO₂ Emission Reduction Overseas in FY2017"

Kitakyushu Urban Centre

The Kitakyushu Office was established in 1999 in the City of Kitakyushu, which made the transition from a city known for pollution to an environmentally-advanced city. Kitakyushu aims to become the world's environmental capital. In 2010, the office was renamed as the Kitakyushu Urban Centre (KUC) and currently conducts practical research activities with Asian cities to promote local governmental initiatives to realise sustainable cities in the areas of low-carbon and resilient cities, sound waste management, and green growth and sound urban environmental management.

Mainstreaming Low-carbon and Resilient Policies

KUC conducted a project on the platform for companies, research and local governments toward achieving low-carbon society in Asia by

organising a workshop and seminar for city-to-city collaboration between Asian cities and Japanese municipalities with the view to utilising the Joint Crediting Mechanism (JCM). In addition, a booklet was published compiling the results of the past five years for 21 cities in nine Asian countries and 12 cities in Japan participating in the city-to-city collaboration programme. In addition, KUC provided a training programme on the development and implementation of low-carbon plans at the city level for local government officials from four Asian cities. Furthermore, based on the investigation on domestic and overseas funds and networks that can be utilised to promote international city-to-city collaboration, KUC compiled a report to provide useful information to Japanese municipalities. KUC also published a discussion paper on how City of Kitakyushu has been a top runner in the field of international city-to-city collaboration by using examples of five Asian cities. Besides, KUC published an issue brief analysing local governments' recent contributions to expand the activities of local energy retail businesses as a model of local production and consumption.



Seminar on city-to-city collaboration in Asia (Tokyo)

Evolving Sustainable Waste Management Practices

Multilayered support has been provided to both national and local governments in Asia. KUC provided technical support for necessary standards and guidelines to ensure sound treatment of solid waste including waste-to-energy technologies targeting six national governments. With two JICA projects, KUC supported capacity improvement of local governments, citizens and NGOs. Also, as part of the UNEP programme on Climate and Clean Air Coalition's Municipal Solid Waste Initiative (CCAC-MSWI), KUC supported the development of a work plan for reducing Short-lived Climate Pollutants (SLCPs) from municipal solid waste in Medan City, Indonesia. In addition, KUC contributed to two publications by the World Bank on waste management.

Promoting Green Growth and Sound Urban Environmental Management

KUC made suggestions for improving the environmental management of industrial parks in the province of Ba Ria-Vung Tau, Viet Nam through a JICA project.

Selected Publications

- Discussion Paper "Actions towards a Sustainable Society: Collaboration between Asian Cities and City of Kitakyushu"
- Issue Brief "Local Production and Consumption of



Renewable Energy Led by Local Governments: Outcomes, Challenges, and What Is Needed to Expand Such Actions"

- "Low Carbon City Profile: Climate Change Actions by Asian Cities in the City-to-City Collaboration Programme"
- "Development Model of Takakura Composting Method as an Appropriate Environmental Technology for Urban Waste Management: Case Study of Hai Phong, Vietnam" (Technol Soc)
- "Practice and Experience of Addressing Climate Change in Japan: Supplementary Reader for the Training Workshop on Climate Change Strategies for Local Governments" (Ministry of the Environment Japan)
- "Japan Case Study in Municipal Solid Waste Management: A Reform Roadmap for Policy Maker" (World Bank)
- "Development of Work Plan for Reducing SLCPs from MSWM in Medan, Indonesia" (CCAC-MSWI)

Regional Centre

IGES Regional Centre in Bangkok (BRC) has served as a hub for networks and partnerships in the Asia-Pacific region since its establishment in 2011. It focuses on priority issues including climate change mitigation, adaptation, environmental safeguards, and sustainable cities, and manages relevant networks for knowledge sharing, as well as implements relevant projects in close collaboration with various supporting organisations and national

and sub-national governments.

Climate Change Mitigation

Focus of the UNFCCC-IGES Regional Collaboration Centre (RCC) has expanded from original CDM tracking activities to other activities related to the Paris Agreement, including a green finance project; an Article 6 and transparency project; provision of technical support to develop carbon pricing instruments for Pakistan as well as ASEAN Working Group on Climate Change under the Collaborative Instruments for Ambitious Climate Action (CI-ACA); and CDM and standardized baselines (SB) support.



RCC team at APFSD (Bangkok)

Climate Change Adaptation

A JICA technical cooperation project for strengthening institutional and policy framework for disaster risk reduction and climate change adaptation integration in ASEAN was concluded. Activities of the Climate Change Asia (CCA) for capacity building were also implemented with the

Regional Resource Centre for Asia and the Pacific (RRC.AP), Asian Institute of Technology (AIT), as well as website supporting for the Asia Pacific Adaptation Network (APAN).

Environmental Safeguards

Asian Environmental Compliance and Enforcement Network (AECEN) increased capacity development of government officials and led information exchange/sharing. AECEN also established connections with key regional stakeholders and successfully conducted the Asian Environmental Impact Assessment Network (AEIAN) Preparatory Meeting.

Sustainable Cities

The implementation of the ASEAN ESC Model Cities Year 3 programme was completed engaging approximately 360,000 individuals in 16 cities and eight countries. Main activities covered: (i) 1-2 National SDGs Workshop; (ii) large-scale

environmental educational campaigns; and (iii) three regional seminars for showcasing achievements, facilitating peer-to-peer learning and networking with supporting organisations. A new 2-year programme, ASEAN SDGs Frontrunner Cities Programme, funded by the Japan-ASEAN Integration Fund (JAIF), will start soon.

Sustainable Consumption and Production (SCP)

Ahead of its official launch in September 2018, the SWITCH-Asia SCP Facility has already started its work covering 19 countries, primarily in South and Southeast Asia. The Consortium of IGES, Adelphi and GIZ - and funded by the European Union - has six full-time staff members based in BRC and the Facility supports SWITCH-Asia Programme, the EU's flagship SCP initiative, and provides technical assistance for SCP policies in target countries. The Facility has also confirmed agendas for national dialogues in Bangladesh and Mongolia while it has also moved forward in Nepal and India.

Global Environmental Outlook (GEO)

GEO-6, UN Environment's flagship report, aims to help policymakers to deliver on the environmental dimensions of the SDGs and the Multilateral Environmental Agreements (MEAs). IGES staff have been heavily involved in GEO for the small island developing states, GEO-6 Asia-Pacific, GEO-6 Global main report, and most recently GEO-6 for Youth.

Selected Publications

- "Catalyzing Green Bonds in ASEAN+3 Countries to Mobilize Finance for Energy Market Transformation" (paper presented at the 41st IAEE International Conference)
- "Project for Strengthening Institutional and Policy Framework on Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA) Integration, ASEAN, Final Report"
- Policy Report "Early Views of ASEAN's 'Frontrunner Cities' on the Sustainable Development Goals (SDGs) and Local Data Management"

Beijing Office <IGES Sino-Japan Cooperation Project Office>

The Beijing Office was set up within the Sino-Japan Friendship Center for Environmental Protection of the Ministry of Environmental Protection of China in 2006 as a base to facilitate the implementation of research activities in China. The office conducts a variety of studies and research activities based



ASEAN ESC Model Cities Year 3 Closing and Reflection Workshop (Pattaya)

on bilateral cooperation with China, as well as multilateral cooperation (including international organisations).

Research Activities in the Area of Water Environment

Since FY2014 the Beijing Office has participated in a Japan International Cooperation Agency (JICA) project on rural wastewater treatment technology system and the creation of management systems. As FY2017 was the final year of the project, meetings to report on project results were held in Tokyo in August and in Beijing in September 2017. Ten research reports were produced and submitted as the final reports on rural wastewater treatment technology system and management systems. The project ended in October 2017.

Research Activities in the Area of Air Pollution

As the overall coordination platform of the “Japan-China Inter-city Cooperation”, a project to improve air quality in China implemented since FY2014, IGES promoted Japan-China cooperation by organising seminars, holding training sessions in Japan, and implementing joint research and model projects. Specifically, IGES held meetings with local governments in China on more than 35 occasions to promote cooperation. IGES also organised seminars in China on seven occasions and held training sessions in Japan on ten occasions with 72 trainees invited from China. In addition, IGES produced a “policy monitoring report” of more than 600 pages, highlighting important policies on air quality in China. The monitoring report was uploaded every month together with an activity report to a

special website created within the IGES website. In a particular achievement in the model project between Fukuoka Prefecture and Jiangsu Province, which aims to simultaneously reduce the emission of air pollutants (such as VOCs) and CO₂ from textile dyeing factories and improve their productivity (co-benefit approach), the first model equipment was installed in a factory in Changshu City in Jiangsu Province as of June 2018. The second equipment installment is expected to take place soon.

Selected Publications

- Serial columns in “Kankyo Shimbun” (every month)
- Serial columns in “Global Net” magazine (every two months)
- Columns in “EIC Net” (irregular)



Seminar on VOC policies and monitoring technologies (June 2017, Beijing)

About 110 people participated in the seminar, including those from the central and local governments of Japan and China that participate in the framework of “Japan-China Inter-city Cooperation,” as well as research institutes and private companies.



IGES invited representatives from the Sino-Japan Friendship Center for Environmental Protection and held consultations with relevant Japanese agencies (October 2017).



Seminar on VOC policies and monitoring technologies (October 2017, Nanjing)

More than 85 people participated in the seminar, including government officers from Fukuoka Prefecture and Jiangsu Province, engineers, researchers and representatives from private companies.

● Tokyo Sustainability Forum

The Tokyo Sustainability Forum (TSF) aims to facilitate impact generation with various stakeholders, particularly those based in Tokyo. It hosts the IPBES Technical Support Unit for the Regional Assessment for Asia and the Pacific (TSU-AP) and is co-located with the office of ICLEI Japan. The Forum implements the Japan Biodiversity Fund (JBF) IPBES Capacity Building Project and also works in collaboration with the Natural Resources and Ecosystem Services Area and the City Taskforce, respectively.

- The Forum assisted IGES staff with meeting support and provided administrative support to IGES President, Managing Director and Senior Fellows/Fellows based in Tokyo in implementing their activities.
- The Forum continued to host IPBES TSU-AP, and supported its work on the Regional Assessment Report.
- The Forum organised a briefing session on the process and overview of IPBES assessments in May 2018, to facilitate active involvement of Japanese experts interested in IPBES work.
- As part of the JBF IPBES Capacity Building Project started in April 2016, and in cooperation with Asia-Pacific Network for Global Change Research (APN) and other relevant stakeholders, TSF carried out the preparation process for organising science-policy dialogues based on the outputs of the IPBES Asia-Pacific assessment.
- With the aim of promoting international cooperation on Environmental Impact

Assessment (EIA) in Asia, TSF implemented several projects under a lump-sum contract with Ministry of the Environment, Japan (MOEJ). These included a study on policy and implementation of EIA systems in seven Asian countries, the establishment of an information platform for the Asia EIA network, and the development of a cooperation plan with Myanmar to enhance its EIA system and implementation.

- With the aim of promoting the recycling and re-use of city waste in the Northeast Asian region, TSF assisted MOEJ in organising a TEMM 3R Seminar for government officials of three countries (Japan, China and Korea), dispatched experts for consultation with a related organisation in China, and organised expert meetings in Japan, under a lump-sum contract with MOEJ.
- In 2017, TSF, supported by Environment Research and Technology Development Fund, launched a research project on development of models, indicators and methodology for economic evaluation to assess the impacts on biodiversity



Briefing session on IPBES assessments (Tokyo)

arising from business activities. Likewise, in collaboration with Conservation International Japan and Nikkei BP Eco Management Forum (currently renamed the Nikkei BP ESG Management Forum), TSF co-organised a series of open seminars on natural capital management. Related stakeholders participated including representatives of the business sector.

- In collaboration with MOEJ and the National Institute for Environmental Studies (NIES), TSF co-organised a symposium in October 2017 in commemoration of the visit of Professor Hans J. Schellnhuber of the Potsdam Institute for Climate Impact Research. The symposium included a keynote speech on the latest scientific findings on climate prediction, followed by discussion on Japan's agenda and required direction to realise a decarbonised society including the expansion of renewable energies for achieving the 2°C reduction target of the Paris Agreement with reference to the experience in Germany.



Symposium in commemoration of Prof. Schellnhuber visit (Tokyo)

Activities at Other Facilities

● Technical Support Unit (TSU) for the Intergovernmental Panel on Climate Change (IPCC) Task Force on National Greenhouse Gas Inventories (TFI)

The TSU for IPCC TFI provides scientific, technical and organisational support to the TFI under the supervision of the TFI Bureau (TFB) to fulfil the following two objectives.

- To develop and refine an internationally-agreed methodology and software for the calculation and reporting of national greenhouse gas (GHG) emissions and removals;
- To encourage the widespread use of this methodology by countries participating in the IPCC and by signatories of the United Nations Framework Convention on Climate Change (UNFCCC).

Development, Maintenance and Improvement of IPCC Inventory Software

The IPCC Inventory Software¹ helps inventory compilers to estimate emissions and removals of greenhouse gases according to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (2006 IPCC Guidelines). In FY2017, the TSU implemented a test of Tier 2 worksheets for the agriculture sector. In addition, the TSU continued to provide technical support to users.

Management of IPCC Emission Factor Database (EFDB)

The IPCC EFDB² is a database of emission factors and other parameters whereby national experts can find nationally appropriate values to develop national GHG inventories in accordance with the IPCC inventory guidelines. In FY2017, the TSU continued enhancing the usefulness of the database by collecting data, organising relevant expert meetings and supporting the EFDB Editorial Board, as well as implementing other activities to improve the database (e.g. improvement of the EFDB website and database system).



15th Editorial Board Meeting for the IPCC EFDB and Joint IPCC/IEA Expert Meeting on Data for the EFDB (Paris, France)

Production of Reports to Supplement or Refine the IPCC Inventory Guidelines

Based on the decision IPCC/XLIV-5, adopted at the 44th Session of IPCC in October 2016, the TSU continued activities for production of a Methodology Report entitled the "2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories" (2019 Refinement). In FY2017, the TSU organised Lead Author Meetings on two occasions in September 2017 and April 2018. The TSU also

organised the Expert Review of the first-order draft of the 2019 Refinement from 4 December 2017 to 11 February 2018 in accordance with procedures established by the IPCC.



Second Lead Author Meeting for 2019 Refinement (Victoria Falls, Zimbabwe)



Third Lead Author Meeting for 2019 Refinement (Cairns, Australia)

Collaboration with Other Organisations

In FY2017, the TSU continued cooperation with other organisations on inventory-related matters. For example, the TSU contributed its support to inventory-related capacity building programmes implemented by the UNFCCC and the National Institute for Environmental Studies (NIES) by sending programme officers as resource persons and

providing inventory-related materials developed by the IPCC TFI.

The TSU also collaborated with other projects in IGES, where appropriate, on matters relating to estimation of greenhouse gas emissions and removals.

- 1 <http://www.ipcc-nggip.iges.or.jp/software/index.html>
- 2 <http://www.ipcc-nggip.iges.or.jp/EFDB/main.php>

● Asia-Pacific Network for Global Change Research (APN)

The APN is an inter-governmental network whose mission is to foster global change research in the Asia-Pacific region, increase the participation of developing countries in that research and to strengthen interactions between the scientific community and decision-makers. In April 2004, the APN Secretariat came under the administrative umbrella of IGES, although the Inter-Governmental

Meeting (IGM) of APN remains as the policy and decision-making body.

In FY2017, APN supported research projects on global change research and capacity building activities through the core programmes of APN, "Annual Regional Call for Research Proposals (ARCP)" and "Scientific Capacity Building and Enhancement for Sustainable Development in Developing Countries (CAPaBLE)". Additionally, APN held a technology needs assessment workshop on climate change mitigation and adaptation in Hanoi in February 2018. This workshop supported the promotion of technology transfer in Southeast Asia through discussions on technology assessments for various sectors such as energy, waste, water



Technology Needs Assessment Workshop on Climate Change Mitigation and Adaptation (Hanoi)



Hokusetsu SATOYAMA International Seminar (Hyogo)

and tropical agriculture, and the sharing of best practices.

In collaboration with the Hyogo Prefectural Government, the host government of the APN Secretariat, APN co-organised the "Hokusetsu SATOYAMA International Seminar" on the topic of utilising natural resources for the regional revitalisation of satoyama environments, and the "Open Forum in the 58th Annual Convention of Japan Society for Atmospheric Environment" to discuss the present conditions of pollution-abatement measures and health effects in Japan and China.

● Japanese Center for International Studies in Ecology (JISE)

JISE primarily carries out field surveys and practical research to restore and reconstruct ecosystems and biodiversity from local to global levels aiming to realise societies based on sustainable development from the perspective of plant ecology. In FY2017, JISE implemented the following activities to promote its projects, including training and information collection and provision on forests, nature regeneration and ecology.

Research Projects

On the international research front, JISE conducted practical research projects aimed at the regeneration of tropical forests, supported by external research grants. Activities included vegetation surveys, promotion of forest conservation and provision of guidance on nurturing seedlings and tree-planting

in Malaysia, Kenya and Lao PDR. In addition, JISE conducted research on plant communities in the monsoon forest of eastern Thailand as fundamental research on tropical forests.

On the domestic front, JISE conducted a survey to monitor the growth of the “Great Forest Seawall,” that was planted aimed at the prevention of disasters after the Great East Japan Earthquake of 2011. JISE also engaged in a few surveys and research to identify potential natural vegetation to enhance disaster prevention maritime forests in the Shikoku and Kyushu regions, where large earthquakes are predicted. As a contribution to improve the plant classification system in Japan, JISE revised the classification system for summer-green broad-leaved forests. Furthermore, outputs of the



Rainforest survey (Malaysia)

above mentioned domestic research projects were released at meetings of the Society of Vegetation Science in Okinawa and the Ecological Society of Japan in Sapporo, as well as in the “Eco-Habitat” bulletin. JISE also promoted release of information to the general public via newsletters and forums.

Based on collaborations with private companies, local governments and non-profit organisations, JISE conducted other activities on forest and nature regeneration. These included planning, making recommendations and providing advice on suitable trees to plant, as well as conducting preliminary field surveys on sites in Akita, Miyagi, Kanagawa, Nagano, Shizuoka, Aichi, Mie and Hyogo Prefectures. Further, JISE conducted monitoring of forest and nature regeneration sites in Shizuoka and Akita Prefectures that were planted under the guidance of the Center and proposed the introduction of adaptive forest management.

Capacity Building

As capacity development projects contributing to environmental conservation, JISE carried out outdoor environmental study programmes, ecological trainings (basic level courses) and vegetation trainings, such as a series of lectures for the general public on the “Wisdom, Technology and Understanding to Protect and Develop Greenery”. In addition, JISE has further developed its collaboration with Kanagawa Prefecture, starting a few collaborative projects with the Kanagawa Prefectural Museum of Natural History and the Kanagawa Institute of Industrial Science and Technology (KISTEC).

Interaction

JISE conducted the Environmental Forum on the topic of “Long-Standing Forest-Building Efforts by Companies” in June 2018. The forum showcased the diverse initiatives and achievements of the Yokohama Rubber Co., Ltd., the AEON Co., Ltd., and the Asahi Kasei Homes Corporation, and included discussions. Additionally, JISE engaged in active international exchanges and public awareness campaigns, including organising tree-planting in Kenya.

Dissemination and Public Awareness

To disseminate news of its activities through its public relations activities, JISE distributed newsletters (three issues a year) to introduce its own activities as well as the efforts of private companies in environmental conservation. JISE also published its annual “Eco-Habitat: JISE Research”, a bulletin containing both domestic and international research results related to ecology, which is available on the internet.



Tree-planting festival in Osaki City, Miyagi Prefecture (October 2017)

● Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Technical Support Unit for the Regional Assessment for Asia and the Pacific (TSU-AP)

IGES hosts the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Technical Support Unit for the Regional Assessment for Asia and the Pacific (TSU-AP), administered by the United Nations Environment Programme (UNEP). This TSU, set up in 2015 within the IGES Tokyo Office (renamed the “Tokyo Sustainability Forum” in 2017), has functioned as an extension of the IPBES Secretariat (Bonn, Germany). Its purpose has been to support and assist in the coordinating of the drafting of the report on the IPBES Regional Assessment of Biodiversity and Ecosystem Services for Asia and the Pacific.

Since its establishment, the TSU has provided

support for around 120 experts in the writing process, author meetings, and preparation of the Assessment Report. In July 2017, the TSU organised the Assessment’s Third Author Meeting at the United Nations University (UNU) Headquarters in Tokyo, and also co-organised a dialogue meeting between the authors and the IPBES national focal points at the Tokyo Office of the Japan Agency for Marine-Earth Science and Technology (JAMSTEC). Furthermore, the TSU has made contributions to outreach, targeting relevant experts and organisations across the region. For instance, the TSU provided information to the 9th Workshop of the Asia-Pacific Biodiversity Observation Network (AP-BON) and to IPBES national coordination meetings organised

by the Ministry of the Environment of Japan. In March 2018, the chapters of the IPBES Regional Assessment Report on Biodiversity and Ecosystem Services for Asia and the Pacific were accepted, and its Summary for Policymakers was approved by the sixth session of the IPBES Plenary held in Medellin, Colombia. Currently, the final stages of the work towards publication and release of the Assessment Report are underway.

Funding for the TSU operations is provided by the UNEP Trust Fund and the Ministry of the Environment of Japan. Further, the activities of the TSU have been supported by partners including the National Institute for Environmental Studies (NIES) and UNU.

About IPBES

IPBES is an intergovernmental body established in 2012 with the objective to strengthen the interface between science and policy related to biodiversity and ecosystem services. The four functions, scientific assessment, capacity building, knowledge generation and policy support, are the pillars of IPBES’ effort to ascertain the status of global biodiversity and ecosystem services, the drivers of change, and the impacts on human well-being. To date, completed deliverables include a Pollination Assessment, the Regional Assessments, and a Land Degradation and Restoration Assessment. A Global Assessment is currently underway, and its report is scheduled to be completed in 2019.

The Regional Assessments were undertaken in four regions of the world (Asia-Pacific, Africa, the Americas, and Europe and Central Asia). Outcomes are expected to assess the state of progress in meeting the Aichi Biodiversity Targets under the Convention on Biological Diversity, as well as progress on the SDGs, and to contribute to policymaking at the regional level.



Third Author Meeting for the IPBES Asia-Pacific Regional Assessment (July 2017, Tokyo)

Strategic Management Office (SMO)

Outline

As a mechanism to effectively promote strategic research and the impact generation of outputs in the Integrative Strategic Research Programme for the 7th Phase (from FY2017), the former Programme Management Office (PMO) and Secretariat were merged to create the Strategic Management Office (SMO). The SMO is charged with three functions: Planning and Management (PM); Knowledge and Communications (KC); and Research and Publications (RP).

Major Activities in FY2017

Communications

Although totals for FY2017 have not yet been finalised, the monthly average for publication downloads during the period from July 2017 to March 2018 was 26,281, a figure higher than FY2016 (20,772). Also, the monthly average for page views (PV) in FY2016 was 50,967, while the monthly average was 58,847 PV during the abovementioned period in FY2017. In addition, while the average number of instances of media coverage in FY2016 was 19 per month, the average for FY2017 was 21 per month. Focusing on Japanese media coverage, the average for FY2017 was 19 per month, the greatest number in the past six years.

In FY2017, IGES moved up a gear on outreach by delivering E-newsletters in both English and Japanese on regular basis (once a month), as well as launching the official IGES Twitter and Facebook pages from June 2018.

Stakeholder Engagement

IGES newly won a contract from the Japanese Ministry of the Environment on facilitation of the Talanoa Dialogue to promote dialogue on climate change amongst multi-stakeholders. Under the contract, IGES has been conducting proactive information outreach through the launch of the Talanoa portal site, operation of social media, and organisation of study meetings for target stakeholders. Moreover, the SMO has led cross-area/unit collaboration within IGES through facilitating these activities.

In addition, from the viewpoint of strengthening mutual collaboration with partner organisations in more strategic manner, IGES newly concluded mutual agreements (such as MOUs) in FY2017 with the Asian Institute of Technology (AIT), the National Environment Commission (NEC) of the Royal Government of Bhutan, Toyama City and Shimokawa Town.

Capacity and Knowledge Services

From FY2017, the SMO serves as a pool of expertise to support each unit. So far, this new endeavour has functioned well in the sharing of know-how, improvement of work operations, and in balancing of the workload amongst team members.

Overall Coordination in Impact Accountability Effort

At the beginning of the FY2017, the SMO held a series of meetings to select 30 potential cases for high level impacts. Then at the end of FY2017, the SMO again conducted a series of meetings with each unit for monitoring and reviewing, whereupon 25 impact cases were specified (see p.4-6 for details). At the informal session of the Board meeting in May 2018, the SMO organised a half-day session to introduce these 25 impact cases. Favourable evaluation was received from Board of Directors and Board of Trustees members on this new endeavour, as well as comments and suggestions for further improvement.

ISAP2017

At the International Forum for Sustainable Asia and the Pacific (ISAP), internationally-engaged experts, governments, international organisations, businesses and NGO representatives gather under one roof to engage in discussions on sustainable development from the viewpoint of the Asia-Pacific region. Over 900 participants from Japan and overseas attended ISAP2017, which was jointly organised by IGES and the United Nations University Institute for the Advanced Study of Sustainability in July 2017.



Flagship Research

IGES conducts flagship research focusing on strategically important policy agendas in the Asia-Pacific region and involving all research units. Under the overall coordination of the SMO, flagship research in FY2017 was conducted on the transformative potential of the SDGs and a proposal for the rule book on implementation of the Paris Agreement. Research outcomes were presented at ISAP.

Quality Management of Research Outputs

IGES implements the “clean production” method of quality management, starting from the planning stages throughout the entire research and writing process of publications. Additionally, IGES actively incorporates internal and external reviews from

impartial and diverse perspectives, aiming to enhance the quality of IGES publications.

IGES serves as the Secretariat of the International Research Network for Low Carbon Societies (LCS-RNet). In March 2018, at a meeting jointly organised by the Japanese Ministry of the Environment and the French Ministry for an Ecological and Solidary Transition (MTES) in Paris, France, LCS-RNet member research institutes from both countries made presentations on joint research results to representatives of the two ministries. Ahead of France hosting the G7 meeting and Japan hosting the G20 meeting in 2019, the feasibility of delivering inputs based on joint research results upon these occasions was pointed out.

Selected Publications

- Flagship Report “Realising the Transformative Potential of the SDGs”
- Flagship Report “Designing the Rules of the Paris Agreement: Creating a Workable Framework beyond Transparency”
- “LCS-RNet 5 Years Ahead”
- “Climate Actions and Interactions with SDGs”
- “The 20-Year History of IGES”

Contributions to Local Communities

IGES actively participated in lectures and various events held for people in the local community, introducing IGES research activities and providing easy-to-understand commentary on global environmental issues. IGES also contributed to activities for local school education by assisting in the integrated studies and workplace experience of students from two junior high schools, one in Hayama Town where IGES headquarters is located, and another in Yokosuka City.

Main Lectures by IGES Researchers

10 February 2018	Shonan Village Academia Café Integral Lecture on Sustainable Development Goals (SDGs)	Hayama
15 February 2018	Seminar on Climate Change from the View Point of Kanagawa Prefecture	Yokohama



Seminar on climate change



Students' integrated studies

Main Events & Exhibitions

3 May 2018	Shonan Village Festival 2018	Hayama
26-27 May 2018	Kanagawa Eco 10 Festa 2018	Yokohama



Appendix



Financial Statements (FY2017)

Balance Sheet (Summary)

Unit:1,000 yen

ASSETS	4,846,513	LIABILITIES	870,448
CURRENT ASSETS	1,278,973	CURRENT LIABILITIES	553,935
NON-CURRENT ASSETS	3,567,540	NON-CURRENT LIABILITIES	316,513
(ASSETS FOR BASIC FUNDS)	(250,000)	NET ASSETS	3,976,065
(RESTRICTED ASSETS)	(3,192,167)	RESTRICTED NET ASSETS	2,553,962
(OTHER NON-CURRENT ASSETS)	(125,373)	UNRESTRICTED NET ASSETS	1,422,103

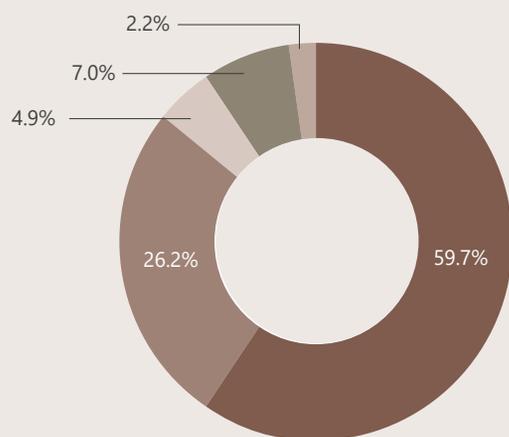
Statement of Activities (All IGES)

Unit:1,000 yen

		Accounting for Project for public interest purpose				Incorporated accounts	FY2017 Total	FY2016 Total
		Strategic Research*1	IPCC/TSU	APN	JISE			
I Changes in unrestricted net assets								
Operating activities	Revenues and gains	2,664,904	169,906	249,620	67,482	247,690	3,382,337*2	3,885,689
	Expenses and losses	2,565,884	177,625	208,035	67,482	247,690	3,245,662*3	3,868,322
Non-operating activities	Revenues from non-operating	0	0	0	267	0	267	0
	Expenses and losses from non-operating	0	98	0	0	0	98	6,875
II Changes in restricted net assets								
Total changes in restricted net assets		△1,356	15,593	0	△16,899	0	△2,662	△31,011
Net assets at end of year		1,160,017	139,038	248,548	2,331,734	79,626	3,976,065*4	3,841,882

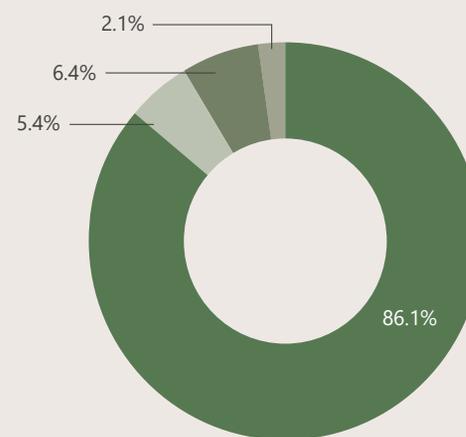
*1 For IGES research activities and dissemination of research outcomes *2, 3, 4 Including internal transactions

Contents of revenues and gain



	Unit: 1,000 Yen
Contract revenue	2,017,163
Contribution*1	886,001
Grants	165,940
Subsidies for office lease	237,490
Income and others	75,743
Total	3,382,337

Expenses and losses



	Unit: 1,000 Yen
Strategic research*2	2,813,574
IPCC/TSU	177,625
APN	208,035
JISE	67,482
<Internal transactions>	△21,054
Total	3,245,662

*1 Including contribution for IPBES-TSU *2 Including incorporated accounts

About IGES

Background

January 1995: Establishment of IGES recommended by the Japanese Prime Minister's Advisory Group on the Global Environment in the Twenty-First Century.

April 1996: Final report on the proposed functions, organisational structure and other aspects of IGES issued by the Discussion Group on Comprehensive Environmental Studies and Education, former Environment Agency of Japan.

March 1998: Establishment of IGES

April 2012: Transition to a public-interest incorporated foundation

Personnel (As of 30 June 2018)	Number of Staff	Non-Japanese Staff*
Strategic Research	132	45
Projects for Public Interest other than Strategic Research	26	9
General Administration	26	3
Total	184	57

* Out of total staff for each category

IGES Headquarters and Offices

● Headquarters

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● Kansai Research Centre

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● Beijing Office (IGES Sino-Japan Cooperation Project Office)

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● Regional Centre

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● IPCC TFI Technical Support Unit [TSU]

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

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● Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Technical Support Unit (TSU)

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Trustees

Mr. Langston James "Kimo" Goree VI	Vice-President, Reporting Services and United Nations Liaison, International Institute for Sustainable Development (IISD)
Dr. Bindu N. Lohani	Former Vice-President, Knowledge Management and Sustainable Development, Asian Development Bank; Distinguished Adjunct Faculty, Asian Institute of Technology (AIT)
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Mr. Takejiro Sueyoshi	Special Advisor, United Nations Environment Programme Finance Initiative
Mr. Masaki Suzuki	Executive Officer, Financial Services Business, AEON Co.,Ltd.
Prof. Yukari Takamura	Professor, Integrated Research System for Sustainability Science (IR3S), The University of Tokyo Institute for Advanced Study (UTIAS)

Directors

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Ms. Hiroko Kono	Journalist
Prof. Ikufumi Niimi	Professor, Faculty of Law, Meiji University
Prof. Dr. Miranda A. Schreurs	Professor, Chair of Environmental and Climate Policy, Bavarian School of Public Policy, Technical University of Munich

Auditors

Mr. Ken Hasegawa	Lawyer
Mr. Hiroyuki Yasuda	Certified public accountant

Honorary Advisors

Mr. Toshiaki Kaifu	Former Prime Minister; Advisor, Global Environmental Action (GEA)
Ms. Yoriko Kawaguchi	Visiting Professor, Musashino University; Fellow, Institute for Global Affairs; Former Member of the House of Councilors; Former Minister of Foreign Affairs; Former Minister of the Environment, Japan
Prof. Hiroshi Komiyama	Chairman of the Institute, Mitsubishi Research Institute, Inc; President Emeritus, the University of Tokyo
Mr. Tomiichi Murayama	Former Prime Minister; Senior Advisor, Global Environmental Action (GEA)
Dr. Emil Salim	Chairman, Advisory Council to the President of Indonesia; Former State Minister for Population and Environment, Indonesia
Dr. Stephan Schmidheiny	Honorary Chairman, Executive Committee, World Business Council for Sustainable Development
Mr. Achim Steiner	Former Executive Director, United Nations Environment Programme
Dr. M. S. Swaminathan	Founder Chairman and Chief Mentor, M. S. Swaminathan Research Foundation; UNESCO Chair in Ecotechnology
Dr. Takeshi Umehara	Honorary Advisor, International Research Center for Japanese Studies

Counsellors

Mr. Nobutoshi Akao	Former Japanese Ambassador to Thailand
Mr. Lucas Assunção	Head of Trade, Environment and Sustainable Development Branch, United Nations Conference on Trade and Development (UNCTAD)
Mr. Tsuguo Ban	Chairman of the Board of Directors, Japan Forest Recreation Association
Dr. Nobuyoshi Fugono	Advisor, Advanced Telecommunications Research Institute International
Dr. William Glanville	Former Vice President, International Institute for Sustainable Development (IISD)
Mr. Shinji Fukukawa	Advisor, Global Industrial and Social Progress Research Institute
Mr. Takahiko Hiraishi	Former Co-Chair, IPCC Inventories Task Force Bureau
Prof. Ryokichi Hirono	Professor Emeritus, Seikei University
Mr. Masami Ishizaka	Former Chairman of the Board of Directors, Okura Zaimu Kyokai
Dr. Shuzo Nishioka	Former Executive Director of the National Institute for Environmental Studies
Mr. Etsuo Kobayashi	Advisor, Hyogo Environmental Advancement Association
Mr. Tomomitsu Oba	Former President, Japan Center for International Finance
Mr. Yasuhiko Okada	Attorney at Law, Partner, Kitahama Partners (Tokyo Office)
Mr. Shigeyuki Okajima	Vice Chairman, Japan Environmental Education Forum
Mr. Masamine Sasaki	Former President, The Japanese Association for Conservation of Architectural Monuments
Dr. Monthip Sriratanan	Director, Climate Change Research Center, National Research Council of Thailand (NRCT)

(in alphabetical order)

Signatory Organisations and Institutions of the Charter for the Establishment of IGES

Total: 48

National Administrative Organisations (16)

Department of the Environment, Water, Heritage and the Arts (Australia)
Ministry of Environment (Cambodia)
Environment Canada (Canada)
Ministry of Environmental Protection (China)

Ministry of Environment and Forests (India)
State Ministry of Environment (Indonesia)
Ministry of the Environment (Japan)
Ministry of Environment (Korea)
Water Resources and Environment Administration (Lao P.D.R.)
Ministry of Natural Resources and Environment (Malaysia)
Ministry of Nature and the Environment (Mongolia)
Ministry of Environment, Science and Technology (Nepal)
Ministry for the Environment (New Zealand)
Department of Environment and Natural Resources (The Philippines)
Ministry of Natural Resources and Environment (Thailand)
Ministry of Natural Resources and Environment (Viet Nam)

International Organisations (6)

International Tropical Timber Organization
United Nations Centre for Regional Development
United Nations Economic and Social Commission for Asia and the Pacific
United Nations Environment Programme
United Nations Institute for Training and Research
United Nations University Institute for the Advanced Study of Sustainability

Research and Academic Institutions (26)

Asia-Pacific Centre for Environmental Law (Singapore)
Center for International Environmental Law (USA)
Earth Council (Costa Rica)
Global Industrial and Social Progress Research Institute (Japan)
Indira Gandhi Institute of Development Research (India)
Institute of Development Studies, University of Sussex (UK)
Institute of Southeast Asian Studies (Singapore)
Institute of Strategic and International Studies (Malaysia)
International Academy of the Environment (Switzerland)
International Global Change Institute, Waikato University (New Zealand)
International Institute for Applied Systems Analysis (Austria)
International Institute for Environment and Development (UK)
International Institute for Sustainable Development (Canada)
Korea Energy Economics Institute (Korea)
Korea Environment Institute (Korea)
National Institute for Environmental Studies (Japan)
Potsdam Institute for Climate Impact Research (Germany)
Sino-Japan Friendship Center for Environmental Protection (China)
Stockholm Environment Institute (Sweden)
Thailand Development Research Institute Foundation (Thailand)
Thailand Environment Institute (Thailand)
The Energy and Resources Institute (India)
VTT Technical Research Centre of Finland (Finland)
World Resources Institute (USA)
Worldwatch Institute (USA)
Wuppertal Institute for Climate, Environment and Energy (Germany)



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