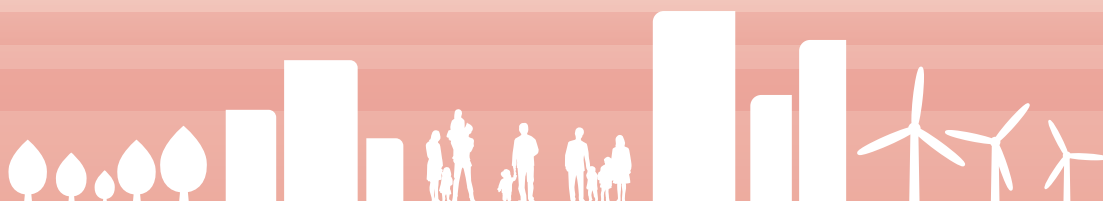




ISAP 2019

International Forum for Sustainable Asia and the Pacific: ISAP
30-31 July 2019

Inclusive transformation: Multi-stakeholder collaboration driving the world towards a Circulating and Ecological Economy



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IGES is an international research institute conducting practical and innovative research for realising sustainable development in the Asia-Pacific region.

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Professional affiliations and titles are correct at the time of the forum.

Event Outline

The International Forum for Sustainable Asia and the Pacific (ISAP) is held annually to share information and facilitate diverse discussions on sustainable development in Asia and the Pacific, with the participation of front-line experts and diverse stakeholders from international organisations, governments, business and NGOs. ISAP began in 2009 as an initiative of the Institute for Global Environmental Strategies (IGES) and has been organised in collaboration with the United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS) (co-organiser since 2011), with cooperation from organisations such as United Nations Environment Programme (UNEP), United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), Asian Development Bank (ADB), Organisation for Economic Co-operation and Development (OECD), National Institute for Environmental Studies (NIES), and many other partners. The Forum has been providing venues for up-to-date discussions with experts and diverse stakeholders from international organisations, governments, business and NGOs and knowledge/information sharing with a wide range of practitioners.

Based on the overall theme of ISAP2019 "Inclusive Transformation: Multi-stakeholder Collaboration Driving the World towards a Circulating and Ecological Economy", focused on inclusive transition taking account of linkages between climate and SDGs, in particular social and environmental goals, deepening the main messages from the Special Report on 1.5 C degrees and HLPF 2019 which focused on climate change and other social related goals.

ISAP2019 featured Plenary Sessions with the four main topics of "climate change", "SDGs", "the role of consumers to bring about change in consumption and production", and "linkages between science and policy", and Thematic Tracks featured more detailed themes to report on the latest trends and present research outcomes of IGES.

Date	30–31 July 2019 (Tue. / Wed.)
Venue	PACIFICO YOKOHAMA, Annex Hall (1-1-1 Minato Mirai, Nishi-ku, Yokohama, Japan)
Organisers	Institute for Global Environmental Strategies (IGES), United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS)
Collaborators	UN Environment (UNEP) / United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) / International Institute for Applied Systems Analysis (IIASA) / International Centre for Integrated Mountain Development (ICIMOD) / Korea Environment Institute (KEI) / The Club of Rome / The Energy and Resources Institute (TERI) / Asia-Europe Environment Forum (ENVforum) / National Institute for Environmental Studies (NIES) / Sustainable Development Solutions Network Japan (SDSN Japan)
Supporters	Ministry of the Environment, Japan / Kanagawa Prefectural Government / Hyogo Prefectural Government / City of Yokohama / City of Kitakyushu / Kawasaki City / Japan International Cooperation Agency (JICA) / ICLEI Japan Office, ICLEI-Local Governments for Sustainability / Global Environmental Action (GEA) / Global Compact Network Japan (GCNJ)
Number of Participants	About 1,000

Opening Session

Opening Ceremony

Welcome Remarks from the Organisers

Representing the organisers, IGES and UNU-IAS, Kazuhiko Takeuchi, President of IGES, gave some welcome remarks. He began by introducing the concept of the Regional Circular and Ecological Sphere, or Regional CES that was first included in the Fifth Basic Environment Plan of Japan. There have been several occasions to introduce the Regional CES to the international community, such as G20 and HLPF. He added that over the next two days, ISAP will focus on the Asia-Pacific region, included the new CES concept, and we look forward to a useful exchange of ideas. ISAP is also an opportunity to gain understanding of IGES research results.



Guest Remarks

Minoru Kiuchi gave some remarks on behalf of the Ministry of the Environment, and congratulated IGES and UNU-IAS for the 11th ISAP. He mentioned that environment, sustainable development and plastic litter were main issues in the Asia-Pacific region, and Japan had formulated a long-term strategy to deal with these challenges, aiming for a net-zero emissions society. Yoshisato Asaba welcomed all the participants to Kanagawa Prefecture on behalf the 9 million residents. He mentioned that IGES is headquartered in Hayama and stated that the institute is an international research institute making a great impact, particularly in the Asia-Pacific region. He hoped that this research on SDGs and climate change would benefit the people of Kanagawa, as well as those in the region and globally.



SDGs Progress in Asia and the Pacific

K. Takeuchi framed the presentation on how to materialise and integrate the goals and targets of the SDGs, from environmental, social and economic aspects. The SDGs are considered powerful instruments and need to be localised, mentioning VLR Lab.

The keynote speech was given by Armida Salsiah Alisjahbana who touched upon how to accelerate actions for the goals and mentioned UNESCAP's report entitled Asia and the Pacific SDG Progress Report 2019 which IGES has translated into Japanese. According to the latest data, progress is not good, and overall the region is not on track with the SDGs, with some goals actually regressing, particularly those related to environmental issues.

The panel discussion noted that it is crucial to accelerate efforts on SDGs. Microplastics was mentioned as one area that is a serious challenge in Asia-Pacific region. Financial support is vital to provide resources and institutional arrangements. Work also needs to be done on climate actions and move from fossil fuels to renewables. Energy access is an important point. It was pointed out that national timelines and roadmaps are essential to integrate SDGs into national policy, as well as regional strategies and international agreements. Political commitment is also important, and all stakeholders must be involved when trying to find ways to mainstream the SDGs in all parts of life. We must be able to translate policies into concrete action plans to turn abstract ideas into down-to-earth action.





Key Messages

- Regional CES should be introduced further to the international community
- SDGs are considered powerful instruments and need to be localised
- National timelines and roadmaps are essential to integrate SDGs into national policy, as well as regional strategies and international agreements.

Plenary Session 1 [P1]

Towards SDG Summit and Beyond:
Leading Practices from Asia-Pacific

DAY1: 7/30, 10:40–11:40

[Speakers]

- **Yuji Kuroiwa**
Governor, Kanagawa Prefectural Government
- **Tokuya Wada**
Deputy Director-General for Environmental Policy, Minister's Secretariat, Ministry of the Environment, Japan
- **Sandra Wu**
Board member, United Nations Global Compact/ Board member, Global Compact Network Japan/ Chairperson and CEO, Kokusai Kogyo Co., Ltd./ Director, Japan Asia Group Limited
- **Mahadi Che Ngah**
Executive Director of Planning, Kuala Lumpur City Hall
- **Yusuke Amano**
Senior Vice President, Japan International Cooperation Agency
- **Bernadia Irawati Tjandradewi**
Secretary General of the United Cities and Local Governments Asia Pacific (UCLG ASPAC)

[Moderator]

- **Junichi Fujino**
Programme Director, City Taskforce, IGES

Summary

The three global agreements reached in 2015—the Sendai Framework for Disaster Risk Reduction, the Sustainable Development Goals, and the Paris Agreement—have invited society as a whole to respond immediately to the challenges ahead of us. Efforts should include civil and civic actors across all sectors of society and be vertically integrated—needing global, national, regional, and local action.

In Japan, sustainable development needs to consider the problems consequence of the super-ageing society. For that reason, both regional and national authorities are creating innovative ways to facilitate the localization of the SDGs. For instance, Kanagawa prefecture has launched two novel ideas. First, the *Me-Byo* (Health-Sick) finds the area in-between these two states by linking well-being principles—such as diet, exercise, and socialization for the elderly—with the SDGs. Second, the *Vibrant Inochi* idea—meaning diversity, healthy longevity, and purpose in life among other ideas—will increase the quality of life of younger and older generations alike.

At the national level, the Ministry of Environment of Japan launched the notion of the Circulating and Ecological Economy (CEE) in its Fifth Basic Environment Plan. The CEE notion grapple with the SDGs as a whole by focusing on the region and the community. It revolves around three main themes: first, resource

SDGサミットおよびその先に向けて: アジア太平洋地域のイニシアティブ

Towards SDG Summit and Beyond: Leading Practices from Asia-Pacific





circulation; second, low-carbon society; and third, living in harmony with nature. Based on these three themes, the CEE tackles social, economic, environmental issues as a whole while simultaneously focusing on improving the well-being of citizens.

Looking at how to trigger global change, there exists countless networks working with different stakeholders to support the attainment of the SDGs. The UN Global Compact is bringing together businesses to think about climate change and support their measures. JICA is implementing cooperation programmes focusing on climate change adaptation and mitigation. UCLG carries out advocacy at the international level, research, and peer-learning for local governments. Another example is the actions taken by Kuala Lumpur, which is fully committed to the Paris Agreement and the SDGs.

The objective is to build and create the Agenda 2030 and a world where nobody is left behind.



Key Messages

- The challenges ahead of human kind requires common action and the adoption of a wholistic viewpoint that simultaneously addresses social, economic, and environment problems.
- In Japan, the national, regional, and local governments are implementing innovative solutions to localize the SDGs. The Ministry of Environment Japan has launched the Circulating and Ecological Economy adopts a wholistic standpoint focusing on material circulation, decarbonization, and living in harmony with nature.
- The global community is tirelessly working to achieve and mainstream the SDGs and mitigate climate change by supporting cooperation initiatives among multiple stakeholders.

Plenary Session 2 [P2]

ISAP2019-ENVforum Joint Session: The Role of Consumers in Triggering Changes in Consumption & Production

DAY1: 7/30, 17:00–18:00

[Rapporteurs]

- **Grazyna Pulawska**
Senior Project Manager,
Asia-Europe Foundation (ASEF)
- **Yasuhiko Hotta**
Director, Sustainable Consumption and
Production, IGES
- **Riko Kimoto**
Project Manager, Sustainable
Development & Public Health
Department, Asia-Europe Foundation
(ASEF)
- **Atsushi Watabe**
Research Manager, Sustainable
Consumption and Production, IGES

[Experts' Commentary]

- **Dechen Tsering**
Director, Asia and the Pacific Office,
UN Environment (UNEP-ROAP)
- **Lukáš-Pokorný**
Head of International Organisations
Unit, Department of International
Relations, Ministry of Environment of
the Czech Republic

[Moderator]

- **Grazyna Pulawska**
Senior Project Manager,
Asia-Europe Foundation (ASEF)

[Closing Remarks]

- **Sun Xiangyang**
Deputy Executive Director,
Asia-Europe Foundation (ASEF)
- **Hideyuki Mori**
Executive Director, IGES

Summary

The session was a joint session between ISAP2019 and the Asia-Europe Environment Forum (ENVForum), which had been held in conjunction with ISAP2019 on 29 and 30 July. The purpose of the session was to introduce the findings of the parallel streams from ENVforum entitled "The Plastic Backlash – How to Cope with the miracle that became a problem" and "New Directions in Food Sustainability: The Food-Health-Sustainability Nexus". There is an increased shift in shared responsibility for environmental impact and sustainability across various sectors including plastic and food, and a greater understanding that consumers cannot be relied alone but need supporting policy and frameworks as well as assign businesses to produce sustainable alternatives. Incentives and disincentives will need to be applied appropriately, with environmental costs being reflected in the sales price, and stakeholders being sensitised to upcoming bans, which should only be in place once alternatives are found. Increasing resource demands further underline the need for a shift to the shared economy. It is vital that both plastics and food are considered as instrumental parts of a wider shift to sustainability. Due to their high visibility, plastics can be an effective entry point to further action. Food should also be not simply be considered from the angle of topics such as food loss and waste but also with consideration of health impacts and issues including antimicrobial resistance. Both need to be considered from a whole lifecycle perspective in order to properly integrate them into circular economy thinking, and sole consideration of upstream or downstream issues should be avoided.





Key Messages

- It is vital that both plastics and food, or any single topic or theme within sustainability, are considered as instrumental parts of a wider shift to sustainability and are addressed from a holistic perspective, incorporating consideration of the circular economy.
- Consumers can be powerful, but triggers to action, and meaningful alternatives, are needed. All stakeholders should be informed of the potential benefits and costs of introducing incentives and disincentives to certain actions, ensuring proper consultation and buy-in.
- There is currently a lack of leadership regarding national regulation and global action with some exceptions. Greater global collaboration and leadership is needed to ensure not only improvements regarding food and plastics, but for the realisation of a truly circular economy for all.

Plenary Session 3-1 [P3-1]

Role of Policy-Oriented Research for Integrated Climate and Development Policies

DAY2: 7/31, 9:30–10:00

[Opening Remarks]

- **Kazuhiko Takemoto**
Director, United Nations University
Institute for the Advanced Study of
Sustainability (UNU-IAS)

[Keynote Presentation]

- **Albert Van Jaarsveld**
Director General and CEO,
International Institute for Applied
Systems Analysis (IIASA)

[Moderator]

- **Hideyuki Mori**
Executive Director, IGES

Summary

This session began with a few remarks from Kazuhiko Takemoto on behalf of UNU-IAS, who explained its mission to serve the international community through innovative contributions to advance scientific knowledge and policymaking for global sustainability. The keynote speech by Albert Van Jaarsveld introduced IIASA which is committed to working on SDGs and climate change. Calling for systemic and integrated understanding, he illustrated the multiple benefits of integrating disciplines, temporal and spatial scales. He gave some key challenges for science for sustainability, and urged more coordination and collaboration, as well as holistic and systems approaches. He outlined analysis of the new World In 2050 project and introduced six major transformations. He stated that more integrative science is needed to cover advances in digital technologies and the interconnections of digital technologies with sustainability.



Plenary Session 3-2 [P3-2]

Integrating Climate Change and the Sustainable Development Goals (SDGs) in Asia: How Can the Link be Strengthened?

DAY2: 7/31, 10:00–11:00

[Framing Presentation]

- **Zhou Xin**
Research Leader, Strategic and Quantitative Analysis Centre, IGES

[Speakers]

- **Albert Van Jaarsveld**
Director General and CEO, International Institute for Applied Systems Analysis (IIASA)
- **Dechen Tsering**
Director, Asia and the Pacific Office, UN Environment (UNEP-ROAP)
- **Yoon Jeyong**
President, Korea Environment Institute (KEI)
- **Chiho Watanabe**
Chief Director, National Institute for Environmental Studies (NIES)
- **Eklabya Sharma**
Deputy Director General at the International Centre for Integrated Mountain Development (ICIMOD)

[Moderator]

- **Eric Zusman**
Research Leader, Sustainability Governance Centre, IGES

Summary

This session drew upon insights from leading thinkers about how research institutions can help policymakers in Asia meet the urgent need for integrated climate and development policies. The session was framed with a presentation on climate actions and SDGs: Synergies and trade-offs from an interlinkage perspective, outlining that climate action-related goals cut across all 17 SDGs through indivisible interlinkages. The IGES SDG Interlinkages Analysis & Visualisation Tool was introduced.

It was agreed that integrating climate change and SDGs is essential, as all of these goals are interconnected and this has practical implications all over world.

There was discussion on the science-policy interface, highlighting constructive actions on how to bridge this in terms of climate change and SDGs. This includes thinking more about research funding allocation, as well as including working with researchers and how to better communicate their message, using simple language that appeals to both policymakers and also politicians. Business people, the general public and other stakeholders can also help strengthen integration.





Key Messages

- Multiple benefits can be gained by integrating disciplines, temporal and spatial scales
- Climate action-related goals cut across all 17 SDGs through indivisible interlinkages
- Sustainability is about the future of human society, and whether a dignified future can be achieved. Societal transformation is therefore vital.

● DAY2

Plenary Session 4 [P4]

Collaborative Action for Climate Change

DAY2: 7/31, 15:00–16:00

[Speakers]

- **Sandrine Dixon-Declève**
Co-President, Club of Rome
- **Yuji Mizuno**
Director, Climate and Energy Area, IGES
- **Ajay Mathur**
Director General of TERI – The Energy & Resources Institute, and a member of the Prime Minister's Council on Climate Change

[Moderator]

- **Tsuyoshi Kawakami**
Principal Fellow, Strategic Management Office, IGES

Summary

This session discussed the climate emergency, and the importance of the Paris Agreement. The economic and financial costs of systems fragility were emphasised, as well as the huge costs of inaction. There are also the issues of law and order, and the socio-political dynamics which require strategic action on a global scale. Some possible solutions were outlined, looking at what makes climate action affordable. Transformation is feasible, and with action, the world can make an emergence from the emergency. The role of finance was emphasised, with the private sector having a major role. To create a world in balance, collaboration is vital.

There was also a presentation on collaborative action for climate change by implementing the Paris Agreement as well as the Paris Rulebook. Introducing the main elements of the Rulebook, it was shown how commitments and actions towards net zero emissions could be achieved by non-state actors, thereby impacting on the next NDCs. Some expectations of COP25 were given, showing the need to move from negotiation to implementation. The final speaker then gave some key issues, such as what collaborative action is essential and how to initiate collaborative action. It is





vital to collaborate to take action in sectors where action is not happening, and where accelerated action and lifestyle change is required. Collaborative action can be initiated with coalitions, as these can be better than international agreements, and with a lead partner, networks can be formed. At the same time, governments must provide incentives. The panel discussion touched on the need to take risks, and responded to questions from the audience on financial and infrastructure issues, and how to support developing countries on data acquisition for the Paris Agreement.



Key Messages

- Climate emergency calls for emergent and collaborative actions
- Non-stakeholders can and should play a main role to influence actions
- Coalition of the willing is vital to make changes and support development, leading to international agreements.



ISAP 2019

- Thematic Tracks
- Technical Workshop

Thematic Track 1 [TT1]

Localisation of SDGs: Global Trends and Message to the UN Summit on SDGs

DAY1: 7/30, 12:00–13:30

Part1

[Speakers]

- **Shuzo Murakami**
President, Institute for Building Environment and Energy Conservation (IBEC)
- **Armida Salsiah Alisjahbana**
Executive Secretary of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)
- **Kazuhide Umemoto**
Deputy Mayor, City of Kitakyushu
- **Bernadia Irawati Tjandradewi**
Secretary General of the United Cities and Local Governments Asia Pacific (UCLG ASPAC)

[Moderator]

- **Yatsuka Kataoka**
Joint-Programme Director, City Taskforce, IGES

Part2

[Speakers]

- **Eriko Yakushiji**
Director General of Climate Change Policy Headquarters, City of Yokohama
- **Yuki Kawahara**
President, Taiyo Juken Co. Ltd.
- **Termsiri Chongpoonphol**
Director, Air Quality and Noise Management Division, Department of Environment, BMA
- **Tadashi Matsumoto**
Head of Unit, Sustainable Development and Global Relations, Centre for Entrepreneurship, SMEs, Regions and Cities, Organisation for Economic Co-operation and Development (OECD)

[Moderator]

- **Shiko Hayashi**
Programme Director, Kitakyushu Urban Centre, IGES

Summary

There is a growing trend for non-state actors such as local governments and private sectors to use SDGs as a tool to achieve sustainable society. This session aimed to share the status and global trends of localisation of SDGs and identify key factors to further facilitate actions, as well as to deliver a message to the UN SDGs Summit which will be held in September 2019. The first-half of the session shared recent status and global trends of localisation of SDGs on the basis of discussion at the High-level Political Forum on Sustainable Development (HLPF) which was held in July 2019. Case studies were delivered by relevant international organisations (UNESCAP and UCLG ASPAC), local government (Kitakyushu city) and an expert (Prof. Murakami), and the significance of localisation of SDGs were discussed. The second-half of the session then shed light on actual activities by different stakeholders, and case studies on local partnership and mutual learning through city-to-city cooperation were shared by local governments (Yokohama City and Bangkok City), small and medium sized enterprises (Taiyo Juken Co. Ltd.), and an international organisation (OECD). The panel then discussed potential future development and directions.

Key Messages

- Actions by non-state actors are important in achieving SDGs, and various activities including development of Voluntary Local Review (VLR) have been intensified
- Integration of different levels of stakeholders as well as providing mandate to each actors to enable promotion of independent efforts is important for promotion of localisation of SDGs. In particular, support of localisation by the central government and the role of local government in localisation is crucial
- SDGs form part of a common language internationally and there are no developed/developing countries on this matter; therefore promotion of mutual peer-learning among local governments is important

Thematic Track 2 [TT2]

SDGs and Business: Leveraging Diversity Management to Implement the SDGs

DAY1: 7/30, 12:00–13:30

[Speakers]

- **Akira Doi**
Assistant to Chairman of the Board
Director for Special Mission,
Global Compact Network Japan
- **Kazuko Jimbo**
Senior Manager,
Scientific Strategy Division,
R&I Center, NIHON L'OREAL K.K.
- **Shunsuke Kawada**
Vice President, Kawada Seisakusho
- **Tetsuro Yoshida**
Senior Policy Researcher,
Sustainability Governance Centre,
IGES
- **Asako Osaki**
National Coordinator,
WE EMPOWER JAPAN

[Moderator]

- **Nobue Amanuma**
Senior Policy Researcher,
Sustainability Governance Centre,
IGES

Summary

First of all, there was a report on the results of joint research on diversity management by IGES and GCNJ. Then it was explained that this session would feature speakers who would discuss the purpose of diversity management, its success factors, challenges in corporate management and necessary policy supports, and then consider the ideal way of diversity management in line with the SDGs philosophy.

Panellists then explained the background of diversity management and related activities by GCNJ and shared L'Oréal's sustainability efforts such as employment support programs for young people living in children's nursing home and for single mothers. It was emphasised that SMEs can contribute to the SDGs by addressing local issues, and further discussions touched on company efforts to create a work environment that draws out the personalities and characteristics of diverse human resources. Lastly, gender equality was indicated as a universal recognition of the basics of SDGs and diversity management, with focus on the significance of spreading the Women's Empowerment Principles in Japan.

During the discussion, challenges in promoting diversity management in Japan were pointed out. These include that there are no laws prohibiting sexual and other types of harassment in Japan and the importance of learning human rights and mental and physical dignity in education.

Key Messages

- Human rights are the basis for SDGs and diversity management.
- The key to promoting diversity management is that companies should find ways to bring out and make use of individual talent and potential. However, there are barriers for each attribute, such as the burden of care work that is biased toward women. Therefore, it is important to identify and visualise ways forward.
- Top commitment is necessary among SMEs which employ 69% of labourers. To this end, it is important to create a place for top managements to gain mutual understanding on corporate philosophy and initiatives.

Thematic Track 3 [TT3]

Strengthening the Synergies between Waste, Climate and the SDGs

DAY1: 7/30, 12:00–13:30

[Speakers]

- **Claudia Giacovelli**
Associate programme officer,
International Environmental
Technology Centre, UNEP/IETC
- **Kentaro Doi**
Director, Ministry of the Environment,
Environment Regeneration and
Resources Recycling Bureau,
General Administration Division
- **Syed Asad Ali Warsi**
Founder & Director, Eco Pro
Environmental Services, India
- **Yoshihide Kageyama**
President, J Bio Food Recycle
Corporation

[Moderator]

- **Kazunobu Onogawa**
Director, The IGES Centre Collaborating
with UNEP on Environmental
Technologies (CCET)

Summary

This session aimed to discuss approaches and issues to achieve effective utilisation of organic waste through methane gas fermentation (biogas). First, waste management issues in Asia were outlined, and it was pointed out that one of the key countermeasures is decoupling of economic growth and environmental resources use. There was a summary of the Ministry of the Environment's legislative frameworks on food waste, and a presentation of the government's efforts and challenges to reduce food loss from households, which is more challenging to regulate by legal schemes than industrial food waste. There was an introduction of a successful biogas business model in Indore City, India. Collected organic waste is transformed into bio-CNG, which is utilised for the public transportation. A biogas facility was introduced, funded and operated by the JFE group and the JR East group in Japan. This large-scale facility is located in Yokohama next to Tokyo, which accepts 80t/day of food waste from the metropolitan area.

The panellists from the private sector commented on the chances and challenges to make biogas business more economically and technically sustainable. The Ministry of the Environment provided some examples of the approaches to reduce or utilise organic waste such as on-demand food purchases through smartphone application, and food waste collection by biodegradable plastic bags.

Key Messages

- Biogas technology has an advantage when recycling food waste from the downstream of the food chain, which is difficult to recycle because of contamination. Currently, most organic waste is incinerated in Japan, but biogas can boost effective utilisation of organic waste as resources, contributing to establishing a circular economy.
- Simultaneously, successful application of this technology has relied on government support (incentives and subsidies). Effective utilisation of methane gas and liquid fertiliser is another issue.
- To promote use of biogas technology in major cities and suburbs, it is vital to ensure economic sustainability along with demand, in line with regional situations.

Thematic Track 4 [TT4]

Policy Dialogue on Single-Use Plastics— Policy Recommendations Working Session

DAY1: 7/30, 12:00–13:30

Summary

The session was a joint session between ISAP2019 and the Asia-Europe Environment Forum (ENVForum), which was held in conjunction with ISAP2019 on 29 and 30 July. The purpose of the session was develop policy recommendations on single-use plastics, following on from the outputs of the session “The Plastic Backlash – How to Cope with the Miracle that Became a Problem” held at the ENVForum on 29 July. A number of key messages on single-use plastics were developed based on the knowledge from the previous day’s session.

The main driver behind plastic waste is overconsumption, and absolute reduction is required. Preventing plastic waste should be understood as more than waste management, needing to be tackled at various levels while ensuring representation of stakeholders at all stages and considering a circular economy approach. Clear channels for consumers to be heard and access to comprehensive information are necessary. There is a need for an enabling environment alongside recognition that there are limitations to what consumers can do. Total bans on plastics are not always a solution unless there is a perfect substitute for plastic. Viable alternatives must be invested in, or their availability ensured, avoiding shifting the problem to other (potentially less sustainable) materials.

Key Messages

- Extended producer responsibility (EPR) systems should be more ambitious, targeting problematic single-use plastics. Systems could include introducing incremental fees and developing a differentiated cost structure to incentivise better environmental design.
- Supply chain regulation remains key for implementing a life cycle approach to plastic packaging management. Main actions are targeting distributors and logistic services (in addition to consumers and retailers), and introducing take-back obligations of transport packaging for large consumer goods.
- Obligatory information disclosure should be considered for large manufacturers, producers, distributors and collectors, emphasising reporting on generation and trade of plastics. Claims on recyclability, reusability, and material reductions should be made a legally enforceable part of product quality standards.

Thematic Track 5 [TT5]

Social Implementation of the Regional Circular and Ecological Sphere Initiative in Japan

DAY2: 7/30, 15:00–16:30

[Speakers]

- **Ryuichi Yamamoto**
Deputy Director,
Climate Change Policy Division,
Environment Management Bureau,
Hyogo Prefectural Government
- **Yasuko Inoue**
CEO, Takarazuka Sumire Electric
Power Co., Ltd.
- **Daisuke Utsunomiya**
Researcher, Suzu City,
Ishikawa Prefecture
- **Mayumi Taka**
Community coordinator,
Suzu City, Ishikawa Prefecture

[Moderators]

- **Kazuhiko Takeuchi**
President, IGES
- **Toshizo Maeda**
Programme Director,
Kansai Research Centre, IGES

Summary

Two regional circular and ecological sphere (CES) initiatives were introduced in this session: one in Suzu City, Ishikawa Prefecture and another in Hokusetsu area, Hyogo Prefecture. The panelists discussed how these initiatives can be further developed and expanded.

Suzu City is blessed by abundant natural resources and associated traditional culture; however, the city faces fundamental challenges, such as declining population, ageing society and outflow of the younger generation. To address these issues, Suzu City, in cooperation with Kanazawa University, United Nations University, other local governments and private companies in the region, among others, initiated a Noto Satoyama Satoumi SDGs Meister Programme, which has fostered more than 180 meisters over the last ten years. Suzu City has also been supporting initiatives by community groups in ten wards to market the local resources. Among them, a group in Awazu area of Misaki Town, which has successfully branded their rice harvested from fields frequently visited by crested ibises, has started using part of the profits for protecting aquatic creatures and biodiversity.

The background of the Satoyama Regional CES project in Hokusetsu area comes from a concept of Hokusetsu Satoyama Museum developed by Hanshin-Kita Office of Hyogo Prefectural Government. Takarazuka Sumire Power Co., Ltd., one of the core members of the project, has built and managed a total of six solar power plants (total output: 186 kW) and has supported Nishitani Solar Sharing Association for the construction and operation of a total of eight units of similar plants (total output: 416 kW) in Nishitani Ward, Takarazuka City.

Panelists discussed how to develop sustainable business models with steady incomes out of these initiatives; how to attract capable personnel for that, how to train them, and how to make use of the trained personnel; and how the local government and other agencies should support them. Suggestions by the panelists were: an important role of local government is to formulate a policy fostering these initiatives, such as the Biocultural Diversity Principal Ordinance in Suzu City in Suzu City and the same on promotion of the use of renewable energy in Takarazuka City; and compilation and dissemination of successful local business models, such as the one exemplified by Takarazuka Sumire Power Co., Ltd.

Key Messages

- For the formulation of a regional CES, encouraging voluntary local initiatives that utilise local resources and supporting them to develop sustainable business models are imperative;
- Local governments are required to formulate local policies fostering these initiatives, develop financial supporting schemes such as subsidies and soft-loans, and facilitate engagement of various stakeholders including private companies, universities and research institutions; and
- Universities and research institutions are expected to promote replication of similar practices through analysing successful business models and disseminating such information.



Thematic Track 6 [TT6]

Towards New Paradigms in Urban-Rural Linkages: Fostering Innovations for Sustainable Resource Management and Collective Resilience

DAY2: 7/30, 15:00–16:30

[Opening Remarks]

- **Kazuhiko Takeuchi**
President, IGES

[Speakers]

- **Rajib Shaw**
Professor, Graduate School of Media and Governance, Keio University
- **Tomoko Takeda**
Policy Researcher, Natural Resources and Ecosystem Services Unit, IGES
- **Sameer Deshkar**
Assistant Professor, Architecture & Planning, Visvesvaraya National Institute of Technology, India
- **Makoto Ishigouoka**
Group Leader, Water Source Environment Conservation Division Environment and Agriculture Bureau, Kanagawa Prefectural Government
- **Bijon Kumer Mitra**
Senior Policy Researcher, Natural Resources and Ecosystem Services Unit, IGES
- **Hassan Virji**
Professor, International Development and Cooperation, Hiroshima University
- **Nanda Jichkar**
Mayor, Nagpur Municipal Corporation

[Moderator]

- **Andre Mader**
Programme Director, Natural Resources and Ecosystem Services Unit, IGES

Summary

The session provided a platform to exchange views on importance of urban-rural collaboration to establish Regional and Local Circulating and Ecological Economy (CEE) and associated challenges. The session opened with a call for strengthening urban-rural partnership for achieving major global agendas including Sustainable Development Goals, Paris Agreement on Climate change and The New Urban Agenda. The framing presentation illustrated urban-rural interlinkage framework and he pointed out a better understanding urban-rural linkages would strengthen governance of integrated planning and implementation, consequently enhances collective resilience. In Japan, it was shown how urban-rural partnership are providing win-win solutions for natural resource management. Results were then presented of ongoing research projects on urban-rural interlinkage in India and in Bangladesh, introducing a stakeholder platform to promote CEE concept to realise synergies in urban-rural collaboration for sustainable natural resource management and collective resilience. In the panel discussion, key components of the Kanagawa water conservation programme were introduced, stressing that for community engagement, transparency in decision-making and implementation is vital. Then a representative of the Nagpur Municipal Corporation expressed commitment to address urban-rural concerns through regional collaborations. International developing agencies had a critical role to mainstream urban-rural collaborations in long-term adaptation investment and it was important to recognise the spatial vulnerabilities of various settlements especially peri-urban areas and distant rural areas.

Organised by: Institute for Global Environmental Strategies (IGES), Keio University and Visvesvaraya National Institute of Technology Supported by: Japan Society for the promotion of Science (JSPS) and Indian Council of Social Science Research (ICSSR)

Key Messages

- Enhancing the continuity and connectedness between urban and rural regions has potentials to revitalise local economy, reduce poverty, inequality and at the same time maintain ecological and cultural diversity that is vital for collective resilience as well as for achieving major global agendas.
- The new concept of Regional-CEE can help to realise synergies of urban-rural partnership. Accordingly, more initiatives should be taken toward evidence-based research, capacity building and partnerships.
- Establishment of urban-rural stakeholder platform can provide assurance to address and incorporate opinions of all concerned stakeholder.

Thematic Track 7 [TT7]

Next Step of ESD for Achieving the SDGs

DAY2: 7/30, 15:00–16:30

[Speakers]

- **Anantha Duraipah**
Director, UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP)
- **Yuto Kitamura**
Associate Professor,
Graduate School of Education,
University of Tokyo
- **Ushio Miura**
Programme Specialist,
UNESCO Bangkok Office - Asia and
Pacific Regional Bureau for Education,
UNESCO
- **Yoko Mochizuki**
Head of Programme, Rethinking Policy,
UNESCO Mahatma Gandhi Institute of
Education for Peace and Sustainable
Development (MGIEP)
- **Masahisa Sato**
Professor, Faculty of Environment,
Tokyo City University

[Moderator]

- **Mario Tabucanon**
Senior Visiting Professor,
UN University Institute for the
Advanced Study of Sustainability
(UNU-IAS)

Summary

The session focused on the past contributions and future possibilities of Education for Sustainable Development (ESD) for achieving SDGs, amidst the global discussions on the ways to achieving the 2030 Sustainable Development Agenda, which will follow the current Global Action Programme (GAP) for ESD.

In the key note speech, the importance was noted of human beings' rational intelligence, and their inherent emotional characteristics, and rationality and emotionality were highlighted to manage the cognitive dissonance. Emotional intelligence could be enhanced through the new form of education; the LIBRE process, which develops four skills of Empathy, Mindfulness, Compassion and Critical Inquiry. Transforming the educational system requires fostering emotional intelligence and adopting scientific evidence.

The panel discussion looked at ways to achieve SDGs, indicating that education plays a key role in transforming individuals and societies. Linking the individual behaviour and our collective action is also important. Community can be a stimulating platform, as it can speak to the emotional part of individual's brain and induce transformative action and change people's mindset. It is expected that Inclusive Education will become more common and in this digital age, technologies could play more effective roles for immediate access to knowledge. It was emphasised to consolidate the systems and look at one particular goal: peaceful and sustainable societies.

Key Messages

- Manage human's cognitive dissonance: Understand rational and emotional interagency and bring effective education.
- Transform education system: Take technology and scientific evidence into education, and bring inclusive education. The systematic changes are required in order for ESD to help create sustainable and peaceful societies.
- Transformative power of education: Use education's power to change the individuals' and societies' behaviours. Their actions let people achieve the SDGs.

Thematic Track 9 [TT9]

Ways forward for building climate resilient societies in the Asia-Pacific Region and the role of AP-PLAT as a regional flagship initiative

DAY2: 7/31, 11:30–13:00

[Speakers]

- **Mimi Nameki**
Deputy Director, Center for Climate Change Adaptation, National Institute for Environmental Studies
- **Naoya Tsukamoto**
Director, Regional Resource Centre for Asia and the Pacific (RRC.AP), Asian Institute of Technology
- **Peter King**
Senior Policy Advisor, IGES
- **Wijarn Simachaya**
Permanent Secretary of the Ministry of Natural Resources and Environment, Thailand
- **Jinhua Zhang**
Regional Coordinator, Environment under Review Programme, Regional office for Asia and the Pacific, UN Environment Programme
- **Eklabya Sharma**
Deputy Director General at the International Centre for Integrated Mountain Development (ICIMOD)
- **Putra Dwitama**
Head of RAN API (National Action Plan on Climate Change Adaptation) Secretariat, Ministry of National Development Planning, Indonesia
- **Yasuo Takahashi**
Special Advisor, Ministry of the Environment, Japan (MOEJ)

[Moderator]

- **Osamu Mizuno**
Principal Fellow, Strategic Management Office, IGES

Summary

Invited panelists including government officials and partner institutions presented and discussed mainly background, outcomes at the G20 Environment Ministerial Meeting, and future efforts for Asia-Pacific Adaptation Information Platform (AP-PLAT), which was officially launched at the G20 Environment Ministerial Meeting in June.

First, the contribution and importance of AP-PLAT in project formulation was demonstrated based on scientific rationale. There was an explanation of the role of the National Institute for Environmental Studies as defined in the newly enforced Climate Change Adaptation Law as well as NIES's role as the secretariat of AP-PLAT. Current and future initiatives by NIES were shared, as they provide scientific information and knowledge via AP-PLAT. There was a presentation about capacity development, one of the three pillars of AP-PLAT, explaining 1) enabling environment for climate-risk informed decision making and practical adaptation action and 2) collaboration with other capacity development institutions.

UNEP would play a complementary role for effective operation of AP-PLAT, and country representatives demonstrated their contribution to AP-PLAT through nationally developing information platform. Finally there was a presentation on the challenges and opportunities of capacity development in South-East Asia and Hindu Kush Himalaya region, with activities in capacity development being introduced, such as trainings and knowledge products.

Key Messages

- In order to accelerate appropriate decision-making and effective adaptation action, strategic partnership is needed by leveraging the strength of each relevant institutions in Asia regions and by complementing their roles each other.
- Improved information and greater scientific knowledge are needed for effective actions and solutions at all scales, and the top priority is to downscale information, such as climate risk assessment.
- Since sound data and information are only valuable when used, in addition to collecting and integrating data, human resources development and institutional capacity development are, inter alia, important to promote effective action and project formulation.

Thematic Track 10-1 [TT10-1]

Communications for Science-Based Decision-making

DAY2: 7/31, 11:30–13:00

[Speakers]

- **Dechen Tsering**
Director, Asia and the Pacific Office,
UN Environment (UNEP-ROAP)
- **Albert Van Jaarsveld**
Director General and CEO,
International Institute for Applied
Systems Analysis (IIASA)
- **Shuzo Nishioka**
Counsellor, IGES
- **Yusuke Matsuo**
Programme Director,
Business Taskforce, IGES
- **Togo Uchida**
Executive Director, ICLEI Japan
- **Erina Imai**
Joint Representative,
Climate Youth Japan
- **Konoe Fujimura**
Green Alliance Japan

[Moderator]

- **Takashi Otsuka**
Joint-Director of Knowledge and
Communications, IGES

Summary

This session opened with key messages from recent global assessment reports and invited speakers representing diverse actors to discuss the knowledge and communication needed for science-based decision-making. The session's interactive polls allowed speakers to reflect on the audience's reception of their presentations and main concerns.

First there was summary of the "Global Environment Outlook 6 (GEO-6)" and "Global Assessment Report on Biodiversity and Ecosystem Services" respectively, and a call for immediate, concerted, and transformative action. The following presentation explained the science of global warming and stated that scientists are not sufficiently effective in communicating to non-scientists. The challenge of putting climate on the agenda for private companies was mentioned, noting that Japan had a limited understanding of the carbon budget. For local governments, it was stressed that, since governments prioritise the wellbeing of citizens, climate action must be framed in terms of the quality of life. Civil society's role was emphasised in working with researchers and exposing the reality of environmental problems using straightforward language. Lastly, it was added that the youth are motivated by peer pressure and curiosity, in addition to science.

Evidently, each stakeholder has different values. Thus, all stakeholders must work to frame the situation in the language of their recipients.

Key Messages

- For effective communication, there is a great need to learn how a range of stakeholders (scientists, local and national policymakers, businesses, civil society, and youth) understand and are motivated by issues.
- Justifications for decisions and actions must be framed in terms of the motivations and values of the recipient.
- Each citizen plays multiple roles in society and are therefore able to take action in a range of situations. Effective communication can empower citizens in these roles to make and advocate for science-based decisions that contribute to transformative action.

Thematic Track 10-2 [TT10-2]

“Asian Industrialisation as a Source of Emerging Pollutants and Environmental Impacts” – Launch Session of Global Environmental Outlook 6 for Industry in Asia and the Pacific –

DAY2: 7/31, 11:30–13:00

[Speakers]

- **Dechen Tsering**
Director, Asia and the Pacific Office,
UN Environment (UNEP-ROAP)
- **Peter King**
Senior Policy Advisor, IGES
- **Girish Sethi**
Senior Director, Energy Program,
The Energy and Resources Institute
(TERI)
- **So-Young Lee**
Research Manager, Sustainability
Governance Centre, IGES
- **Ngoc-Bao Pham**
Senior Policy Researcher,
Natural Resources and Ecosystem
Services Unit, IGES
- **Andre Mader**
Programme Director,
Natural Resources and Ecosystem
Services Unit, IGES

[Moderator]

- **Tetsuo Kuyama**
Programme Director,
Regional Centre in Bangkok, IGES

Summary

This session was considered a “Launch Session” of “the Global Environmental Outlook 6 for Industry in Asia-Pacific”, which was collaboratively produced by UNEP and IGES earlier in 2019. The Asian and Pacific region is experiencing rapid economic growth through industrialisation by polluting and contaminating the environment. Although many countries in the region have recognised the major issues of regulating and controlling pollution and waste, the authors pointed out the ongoing impact on climate, air, water scarcity and quality and biodiversity. In addition, there are less-known but significant emerging issues such as electronic waste, pharmaceutical pollution and overuse of antibiotics, microplastics, genetic modification and nanoparticles. The speakers, who are also authors of the report, suggested measures such as: energy audits and high efficiency standards to improve industrial energy efficiency; a new governance arrangement and stakeholder partnership between the public and private sector for air pollution concerns; the holistic approach by the local governments to tackle water scarcity and quality; and new policy responses to the complex technological transitions for biodiversity conservation.

Key Messages

- Industrialisation is proceeding rapidly in Asia and the Pacific and has lifted millions of people out of poverty. The downside of this has been air, water and land pollution, depletion of natural resources, and a contribution to climate change.
- As industrial production systems transition in advanced countries to the use of robots, artificial intelligence and blockchain technologies, there are multiple opportunities to minimise the impact of industry on the environment.
- These opportunities will not emerge on their own. Governments and industry need to work together to come up with sustainable solutions to the emerging environmental problems in the region.

Thematic Track 11 [TT11]

G20 Ministerial Meeting on Energy and Environment 2019 – Its Significance and Outlook –

DAY2: 7/31, 11:30–13:00

[Speakers]

- **Hiroshi Ono**
Director General,
Environmental Management Bureau,
Ministry of the Environment, Japan
- **Kazuhiko Takeuchi**
President, IGES
- **Satoshi Kojima**
Principal Coordinator,
Research and Publications Unit,
Strategic Management Office, IGES
- **Yoriko Meguro**
Co-president, W20

[Moderators]

- **Mark Elder**
Director of Research and Publications,
Research and Publications Unit,
Strategic Management Office, IGES
- **Tsuyoshi Kawakami**
Principal Fellow,
Strategic Management Office, IGES

Summary

The energy and environment ministerial meeting was held for the first time in the history of the G20 summit. The concept of the virtuous cycle of environment and economy was accepted positively. As outcome documents, a communique and three action plans were adopted: 1) "G20 Karuizawa Energy Innovation Action Plan" for accelerating the virtuous cycle of environment and growth, 2) "G20 Implementation Framework for Actions on Marine Plastic Litter", and 3) "G20 Action Agenda on Adaptation and Resilient Infrastructure" including ecosystem approach. The policy proposals made by engagement groups such as scholars (S20), think tanks (T20), women (W20), and business (B20) were reflected in the communique and G20 leaders' declaration. Meanwhile, regarding climate change policies, the G20 leaders' declaration did not go so far as to specify effective countermeasures for the progression of mitigation targets, since these depend on the circumstances of each country. If the proposals from each engagement group can be shared at an early stage of the process such as pre-meetings starting from six months before, these proposals would be more likely to affect the G20 leaders' declaration. It is vital to ensure the effectiveness of the G20 leaders' declaration, collaborating with various countries, through political processes relevant to the G20 and high-level meetings.

Key Messages

- "Environment" was the keyword at the G20 Osaka Summit, and the concept of the virtuous cycle of environment and growth accelerated through innovation was widely supported.
- Three action plans were established regarding innovations generating smooth circulation of environment and economy, resource efficiency improvements and measures on marine plastic litter, and adaptation and resilient infrastructures.
- Engagement groups by scholars, think tanks, women, and businesses have been becoming an important mechanism constituting the G20 leaders' declaration.

Thematic Track 12 [TT12]

Progress of China-Japan-Korea Joint Research Project on Cities Towards Decarbonisation and Sustainable Development

DAY2: 7/31, 11:30–13:00

[Welcome Remarks]

- **Keiko Segawa** Deputy Director General, Global Environment Bureau, Ministry of the Environment, Japan

[Opening Remarks]

- **Zhen Sun** Deputy Director General, Department of Climate Change, Ministry of Ecology and Environment
- **Sang In Kang** Chief Research fellow, International Cooperation, Korea Environment Institute (KEI)
- **XXXXXXXXXXXX** Chief Research fellow, International Cooperation, Korea Environment Institute (KEI)

[Speakers]

- **Yoon Jeyong** President, Korea Environment Institute (KEI)
- **Kenya Katayama** Mayor of Niseko Town
- **Dong Wang** Director, Shenzhen Research Centre on Climate Change
- **Fen Li** Chief Engineer, R&D center, Shenzhen Institute of Building Research Co., Ltd
- **Kim Jin Young** Director for Asia, Global Green Growth Institute (GGGI)
- **Sangmin Nam** Deputy Head, East and North-East Asia Office, UNESCAP

[Moderators]

- **Xiu Yang** Senior Researcher, National Center for Climate Change Strategy and International Cooperation (NCSC)
- **Junichi Fujino** Programme Director, City Taskforce, IGES

Summary

This session highlighted the progress to date of the *China-Japan-Korea Joint Research Project on Cities towards Decarbonisation and Sustainable Development*. This project aims to inspire more ambitious decarbonisation efforts not only in cities in China, Japan, and Korea, but also in cities in the Asia Pacific Region and beyond.

Worldwide, there is a growing urgency to reduce CO₂ emissions. Considering that urban areas account for more than 70% of the total CO₂ emissions, cities will play a central role in attaining the targets signaled by the Paris Agreement. Local governments in China, Japan, and Korea have already started to put forward mitigation strategies. Presentations from representatives of cities from the three countries showed the great efforts being made at the local level with very promising initial results. By decarbonizing, cities are not only contributing to mitigate climate change but also are benefiting from a myriad of co-benefits—including the reduction of air pollution as well as contributing to the achievement of the SDGs.

Still, there is a need to equip cities with tactics to plan and develop their decarbonisation plans. Through finding best practices in cities in the three countries, the outcomes of this project aims at accelerating decarbonisation efforts. One possible way forward is to mirror the Nationally Determined Contributions at the local level by creating Locally Determined Contributions.

Key Messages

- Cities are taking a leading role in reducing CO₂ emissions in China, Japan, and Korea—in many cases, even surpassing national reduction targets.
- The main challenge is how accelerate decarbonisation while simultaneously promoting urban economies and improving quality of life.
- Giving the importance of cities in climate change mitigation, it was proposed to replicate Nationally Determined Contributions (NDC) at the local level by creating Locally Determined Contributions (LDC).

Thematic Track 13 [TT13]

What is Transition Management/ Governance toward a Decarbonised Society?

DAY2: 7/31, 13:15–14:45

[Speakers]

- **Kentraro Tamura**
Research Leader,
Climate and Energy Area, IGES
- **Akihisa Kuriyama**
Policy Researcher, Strategic and
Quantitative Analysis Centre, IGES

[Via live video link]

- **Derk Loorbach**
Director, Dutch Research Institute for
Transitions (DRIFT), Erasmus University

[Moderator]

- **Mikiko Kainuma**
Senior Research Advisor, IGES

Summary

This session featured a keynote speech from an expert who initiates pioneering research activities on transition management / governance. Followed by the explanation of the historical background of transition management and the basic concept of the transition mechanism, there was an explanation on the long-term strategies for the industry in the Port of Rotterdam as well as zero-emission initiatives in the transport sector in the city of Rotterdam. IGES research was then introduced, which applied the transition management / governance framework to the coal industry in China and India. Some “retrospective measures” and “forward measures” were highlighted for employees in coal industries to address challenges. This was followed by a presentation on the basic concept of “just transition” according to the situation in Japan, and analysis for transition management in Japan’s power sector focusing on the impact on the labour population by region. Finally, a panel discussion was held to further deepen discussions on the ideal way of transition management / governance, and the implications for Japan’s long-term strategy.

Key Messages

- To achieve a decarbonised society, it is important to avoid the lock-in effect to unsustainable social structures and to promote the transition of energy and society based on the aspect of governance that considers the system (dominant culture, customs, society).
- One approach for such a transition is to expand niche efforts and activities that incorporate advanced technologies and concepts across the whole of Japan. Therefore, transition management is necessary involving various stakeholders including citizens, to formulate climate policies.
- Policy support corresponding to changes in employees in each region may be effective to facilitate a smooth transition to a decarbonised society.

Thematic Track 14 [TT14]

How to Track the Progress of NDC– Approach of Multi-layer PDCA-cycles

DAY2: 7/31, 13:15–14:45

[Speakers]

- **Naoki Matsuo**
Principal Policy Researcher,
Research and Publications Unit,
Strategic Management Office, IGES
- **Ajay Mathur**
Director General of TERI – The Energy
& Resources Institute, and a member
of the Prime Minister's Council on
Climate Change
- **Noboru Yumoto**
Energy and Environment Institute,
Inc. CEO

Summary

This session promoted discussion on the key elements to evaluate the progress of domestic measures for NDC targets.

The first presentation highlighted several points including that international reporting under PA is a good chance to introduce domestic framework with inter-ministerial coordination/collaboration, and that the PDCA-cycle for each action is the key to improve the performance. It was mentioned that selection and monitoring of specific key performance indicators (KPIs) is used for evolving process, and that preparing multi-layer type PDCA-cycles is essential for integrated policy actions.

In the second presentation, key indicators were introduced such as electrification rate and load factor in the power sector. In conclusion, it was stated that since the power sector has a great deal of information/data, it is realistic to apply the PDCA-cycle established in the power sector to other sectors.

PAT (Perform, Achieve and Trade) was introduced in India in 2012. This is a certification scheme for goal achievement in energy saving similar to the emissions trading system. Important elements to evaluate progress of NDC with the case of PAT were presented, including to let the market work with a rational market price to incentivise entities properly for sustainable programmes. Monitoring is also vital to ensure rationality of the price.

Key Messages

- Reporting system for the Paris Agreement should be used as a trigger to introduce cross-cutting framework of domestic actions.
- Policy actions constitute a multi-layered structure from upper policy/action plan to each programme/project. Preparing and implementing PDCA cycles for each level is key to improve each performance.
- It is important to track progress of key performance indicators (KGI, KPIs) according to the character of the measure in order to let the PDCA-cycle work.

Thematic Track 15 [TT15]

Approaches for Transferring Low-carbon Technologies in Developing Asia

DAY2: 7/31, 16:20–17:50

[Speakers]

- **Ajay Mathur**
Director General of TERI – The Energy & Resources Institute, and a member of the Prime Minister's Council on Climate Change
- **Ryuzo Sugimoto**
Director, International Cooperation and Sustainable Infrastructure office, Global Environmental Bureau, Ministry of the Environment, Japan
- **Motohiro Washimi**
General Manager, International Research & Communication Department, The Energy Conservation Center, Japan (ECCJ)
- **Gen Takahashi**
General Manager, Business Development, JFE Engineering Co., Ltd.
- **Tsukasa Saito**
IGES Fellow (former Hitachi Industrial Equipment Systems Co., Ltd.)

[Moderators]

- **Toshizo Maeda**
Programme Director, Kansai Research Centre, IGES
- **Yutaka Suzuki**
Director, IGES Kansai Research Centre

Summary

Energy conservation policies in India have rapidly been formulated over the last decade. Japan played a catalytic role in this process as Ajay Mathur, former Director General of the Bureau of Energy Efficiency (BEE), Government of India, stated, “We (India) have shamelessly borrowed Japan’s energy efficiency policies”. Since the inception of the Perform, Achieve and Trade (PAT) scheme in 2012, which mandated designated energy intensive industries to reduce their carbon emissions, it has proliferated from less than 500 designated consumers (DCs) in eight industrial sectors to target over 900 in thirteen sectors. According to The Energy Conservation Center, Japan (ECCJ), which has been supporting BEE in developing Energy Conservation Guidelines and Energy Management Manuals and their implementation at selected model factories, large industries in India have enough financial and human resource capacities to implement energy efficiency measures. In contrast, small and medium-sized enterprises (SMEs) lack both capacities. In response to that, BEE is developing similar guidelines and manuals for SMEs.

Under Japan-India Technology Matchmaking Platform (JITMAP) jointly managed by IGES and The Energy and Resource Institute (TERI) with support from the Ministry of the Environment, Japan, application of energy efficient compressed air system has been widely promoted that has successfully led to energy conservation and improved production processes and working environment at selected factories. Those low-carbon technologies (LCTs) and better operating practices have high application potential in India; however, it requires improved understanding of the technologies, including the long-term benefits like durability and low operational and maintenance costs, which is often one of the major constraints for adoption. Imparting such knowledge through the provision of practical training for energy auditors and energy managers as a means to influence decisions by company managers, as well as showcasing demonstration projects using a funding scheme like Joint Credit Mechanism (JCM), was recommended to change their mindsets by the panelists. For example, the JCM has been successful in diffusing energy efficient transformers and pumps in other Asian countries. Loose enforcement of environmental regulations was also raised as another constraint for adopting LCTs like waste-to-energy plants. Training of relevant national and subnational government officials to improve their understandings of the economic and legal aspects as well as environmental and social impacts of those plants was also suggested to address it.

Key Messages

- Energy efficiency has been intensively promoted in the industrial sector in India and there is a high application potential of LCTs and better operating practices in SMEs.
- Imparting appropriate knowledge of the LCTs, including the long-term benefits and social and environmental impacts, to relevant persons, such as energy auditors, energy managers, company decision-makers and government officials, through provision of training is imperative to promote their adoption.



Thematic Track 16 [TT16]

Mid Century Strategies in Japan and the EU under the Paris Agreement: Challenges and Strengthening Efforts for Achieving a Decarbonised Society

DAY2: 7/31, 16:20–17:50

[Speakers]

- **Tsuyoshi Kawakami**
Principal Fellow,
Strategic Management Office, IGES
- **Diego Silva Herran**
Fellow, IGES
- **Nobuhiro Kino**
Director, Low-Carbon Society
Promotion Office,
Ministry of the Environment, Japan
- **Georgios Zazias**
Energy Analyst and Modeller,
E3-Modelling P.C.
- **Olivia Gippner**
Policy Officer,
Economic Assessment and Strategy,
European Commission Directorate
General for Climate Action

[Moderator]

- **Masahiro Sugiyama**
Associate Professor,
Institute for Future Initiatives,
University of Tokyo

Summary

This session discussed the long-term low greenhouse gas emission development strategies, also called mid-century strategies (MCS) or long-term strategies (LTS), of both Japan and the EU (*1). The presentations and the panel discussion by policymakers and modelling experts, representing both Japan and the EU, helped to enhance mutual understanding of the key elements of their respective LTS, and indicated the future possible collaboration in the scenario analyses for further enriching the LTS and their future implementation. In particular, the discussion has evolved around the commonalities and differences as well as the gaps and challenges, in the features of LTS, development processes, and approaches towards resolving issues.

*1: Under the Paris agreement, Parties should strive to formulate and communicate their LTS by 2020. Japan has just submitted its LTS to the UNFCCC in June 2019, while the European Commission's proposal on the strategic vision aiming to climate neutral by 2050 is under the discussion among the relevant stakeholders in EU.

Key Messages

- To achieve the ambitious long-term goals of Japan and EU, “disruptive changes” including energy transition to renewable and changing people’s consumption patterns and behaviour are required.
- Scenario analyses are useful to show with a scientific basis the different possible pathways to achieve the long-term goals, and to facilitate discussions based on the experience of the EU, for further enhancing Japan’s long-term strategy.
- The biggest challenge for the implementation of the long-term goal is communication of the outcome with relevant stakeholders across society and the business sector.

Thematic Track 17 [TT17]

How to Enable Constructive Discussion on Carbon Pricing

DAY2: 7/31, 16:20–17:50

[Speakers]

- **Yukari Takamura**
Professor, Integrated Research System for Sustainability Science (IR3S), The University of Tokyo Institutes for Advanced Study (UTIAS) (t.b.c)
- **Suk Sunhee**
Associate Professor,
Faculty of Environmental Science
Graduate School of Fisheries and Environmental Sciences Nagasaki University
- **Naoki Matsuo**
Principal Policy Researcher,
Research and Publications Unit,
Strategic Management Office, IGES
- **Satoshi Kojima**
Principal Coordinator,
Research and Publications Unit,
Strategic Management Office, IGES

[Moderator]

- **Shuzo Nishioka**
Counsellor, IGES

Summary

Looking at dynamic societal changes occurring outside decarbonisation policy is necessary. The IPCC scientifically estimated the carbon budgets; the 1.5–2°C goal stipulated in the Paris Agreement is driving transformative changes in enterprise behaviours. Carbon pricing (CP) is expected to play a role of inducing transitions of the society to a new dimension, with the remaining carbon budgets used efficiently. Countries introducing CP are increasing around the world, including an emission trading scheme (ETS) in Korea, despite industry opposition. Since the introduction of ETS, actions of setting internal carbon price have been transforming enterprise behaviours, broadening the recognition that carbon reductions would rather lead to profits. In Japan, it is vital to discuss the balance between a carbon price and its total burden within a transition process towards the low carbon society, and to compare CP with other policy instruments as well. CO₂ can be reduced more effectively by design and implementation of market mechanism when its strength is maximised, which is intended for inducing industrial structural changes, technical advancements, and simultaneous solutions of economic and social problems. However, CP is not a panacea, and thus, a portfolio including redistribution of governmental revenues, research and development (R&D), and promotion of investments into R&D is required.

Key Messages

- Carbon pricing (CP) can be an effective tool to influence the 'base' of the society, when inducing decarbonisation by an efficient usage of the remaining carbon budgets estimated scientifically.
- In Japan, discussions should include experiences of CP in other countries based on shared visions of green growth between the government and industry, thereby accelerating transformations, and increasing effectiveness of emission reductions.
- It is important to aim for industrial structural changes, technological advancements, and simultaneous solutions of socioeconomic problems in addition to emission reductions via market mechanisms, and to design rules for CP to complement other policy instruments.

Technical Workshop 1 [TW1]

Efficient Use of Organic Waste and its Treatment Technology

DAY1: 7/30, 15:00–17:30

[Speakers]

- **Yosuke Koga**
Section Chief, Biomass Circular Resources Division, Food Industry Bureau, MAFF
- **Yasunori Kawai**
Manager, Innovation center, AISIN SEIKI Co., Ltd.
- **Yoshiyasu Okaniwa**
Executive director, Biogas Process Council
- **Masaru Yamaoka**
Leader, Aquatic Environmental Engineering Unite Hydraulic Engineering Research Division, Institute for Rural Engineering, NARO (National Agriculture and Food Research Organization)

[Moderator]

- **Kazunobu Onogawa**
Director, The IGES Centre Collaborating with UNEP on Environmental Technologies (CCET)

Summary

Following Thematic Track 3, this session was dedicated to discussing methane fermentation (biogas) in rural areas while Thematic Track 3 focused on the city cases. The government policies and successful cases of effective utilisation of liquid fertiliser were introduced. There was a presentation on the biogas business in India and Bangladesh, where the company runs the small-scale biogas power generation systems by using cow and chicken manure. The company applies its advanced engine technology to the systems. Issues on Feed-in Tariff (FIT) were then mentioned with emphasis that it is important to consider not only selling the power through FIT, but also cost-benefit performance of the entire biogas business in order to monetise the biogas systems efficiently. There was an explanation of the issues on utilisation of liquid fertiliser and heat energy produced by biogas system from the academic point of view.

In the panel discussion, the issues and benefits on commercialisation of biogas systems in Asia were discussed such as investment recovery, market status, the government subsidy, and benefit for the local residents. Also, the panellists shared successful domestic cases where municipalities supported to promote utilisation of liquid fertiliser in cooperation with local farmers.

Key Messages

- Biogas produces renewable energy including gas, heat, and electricity, which has economically high value, and is a way to utilise organic wastes as resources. So biogas business has high potential to contribute to establishing circular economy.
- There are technical, financial and institutional issues such as utilisation of liquid fertiliser and subsidies. However, successful cases have been observed in rural areas in both Asia and Japan. Biogas business can grow by developing business models appropriate to different conditions.
- It is necessary to establish more economically sustainable models to encourage business entities and municipalities to enhance biogas systems.

Technical Workshop 2 [TW2] | Youth Session

Youth Actions towards the Tokyo 2020 Games

DAY2: 7/31, 9:00–11:00

Summary

Building on the information and ideas provided by GEO for Youth Asia and the Pacific, coordinated by the Regional Office for Asia and the Pacific in UN Environment (UNEP-ROAP), this session discussed the potential actions and contributions by youth to the Tokyo Olympic and Paralympic Games 2020 and beyond in regard to sustainability. The session moderators introduced the report, discussed actions for young leaders from various perspectives to contribute to environmental improvement with the 2020 Tokyo Olympic and Paralympic Games as a milestone, and pointed out the importance of actions by young people.

Key Messages

- The Tokyo Olympic and Paralympic Games will be held in 2020 with a strong emphasis on sustainability through public participation, such as creation of medals through urban mining of e-waste, award ceremony platforms through plastic recycling, and green procurement.
- Participants of the session, including youth representatives, Tokyo Organising Committee of the Olympic and Paralympic Games, international organisations, research organisations, government, acknowledged the need to collectively work towards a sustainable society, with the Olympic and Paralympic Games as a milestone event.
- Youth will contribute to actions as athletes, raising awareness, and providing ideas and initiatives.

Mini Stage

For the first time, an interactive “mini stage” was set up at ISAP, as a means for a dynamic type of presentation whereby the participants could interact directly with the speaker. A total of six sessions on Nitrogen management (by Kentaro Hayashi, National Agriculture and Food Research Organization) and GEO for Youth (by Tomoko Takeda, IGES) were held over two days, with a total of about 50 participants. It was found to be a good venue for exchanging ideas, and there were requests from participants that the timetable for sessions be placed on the official programme from next year so that participants can know when to attend.



Closing Plenary

Takeaway and way forward

Naoki Mori expressed his gratitude to the speakers, discussants, moderators, and participants for the fruitful discussions on the theme of "Inclusive transformation: Multi-stakeholder collaboration driving the world towards a Circulating and Ecological Economy" at ISAP 2019 and for the many lessons and experiences that were shared. He pointed out the need to change our lifestyles toward a sustainable society and said that to do so, we need to shift our financial flows to more sustainable and greener practices. He commented that various efforts are being made in the financial industry, including ESG investment which is expanding on a global scale, but the size is still limited, and it is important for us, as consumers, to make a greener choice to accelerate further.

Hideyuki Mori expressed his gratitude for a large number of participants and the offering more diverse programs than usual. And, the new trial of ISAP with the aim of the sustainable operation was introduced. He pointed out the importance of collaboration in implementing SDGs, and shared the outcomes and future challenges of ISAP2019 with participants through interactive communication tools. Finally, he pledged to develop ISAP into a better forum in terms of "participation" and "discussion."



Programme

DAY1: Tuesday, 30 July

9:30	Opening Session OP ♡ F201–204			
	Opening Ceremony			
	[Welcome Remarks] • Kazuhiko Takeuchi President, IGES [Guest Remarks] • Minoru Kiuchi State Minister of the Environment, Japan • Yoshisato Asaba Vice Governor, Kanagawa Prefectural Government [Moderator] • Nobutoshi Miyoshi Managing Director, IGES			
	SDGs Progress in Asia and the Pacific			
	[Framing Presentation] • Kazuhiko Takeuchi President, IGES [Keynote Presentation] • Armida Salsiah Alisjahbana Executive Secretary of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) [Speakers] • Ajay Mathur Director General of TERI – The Energy & Resources Institute, and a member of the Prime Minister's Council on Climate Change • Wijarn Simachaya Permanent Secretary of the Ministry of Natural Resources and Environment, Thailand [Moderator] • Hideyuki Mori Executive Director, IGES			
10:40	Plenary Session 1 P1 ♡ F201–204			
	Towards SDG Summit and Beyond: Leading Practices from Asia-Pacific			
	[Speakers] • Yuji Kuroiwa Governor, Kanagawa Prefectural Government • Tokuya Wada Deputy Director-General for Environmental Policy, Minister's Secretariat, Ministry of the Environment, Japan • Sandra Wu Board member, United Nations Global Compact/ Board member, Global Compact Network Japan/ Chairperson and CEO, Kokusai Kogyo Co., Ltd./ Director, Japan Asia Group Limited • Mahadi Che Ngah Executive Director of Planning, Kuala Lumpur City Hall • Yusuke Amano Senior Vice President, Japan International Cooperation Agency • Bernadia Irawati Tjandradewi Secretary General of the United Cities and Local Governments Asia Pacific (UCLG ASPAC) [Moderator] • Junichi Fujino Programme Director, City Taskforce, IGES			
11:40				
11:40–12:00	20 minutes break			
12:00	Thematic Tracks			
	Localisation of SDGs: Global Trends and Message to the UN Summit on SDGs TT1 ♡ F201–204	SDGs and Business: Leveraging Diversity Management to Implement the SDGs TT2 ♡ F205	Strengthening the Synergies between Waste, Climate and the SDGs TT3 ♡ F206	Policy Dialogue on Single-Use Plastics– Policy Recommendations Working Session TT4 ♡ Harbor Lounge B
	Part1 [Speakers] • Shuzo Murakami President, Institute for Building Environment and Energy Conservation (IBEC) • Armida Salsiah Alisjahbana Executive Secretary of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) • Kazuhide Umemoto Deputy Mayor, City of Kitakyushu	[Speakers] • Akira Doi Assistant to Chairman of the Board Director for Special Mission, Global Compact Network Japan • Kazuko Jimbo Senior Manager, Scientific Strategy Division, R&I Center, NIHON L'OREAL K.K. • Shunsuke Kawada Vice President, Kawada Seisakusho • Tetsuro Yoshida Senior Policy Researcher, Sustainability Governance Centre, IGES	[Speakers] • Claudia Giacobelli Associate programme officer, International Environmental Technology Centre, UNEP/IETC • Kentaro Doi Director, Ministry of the Environment, Environment Regeneration and Resources Recycling Bureau, General Administration Division • Syed Asad Ali Warsi Founder & Director, Eco Pro Environmental Services, India • Yoshihide Kageyama President, J Bio Food Recycle Corporation	XXXXXXX XXXXX XXXX XXXXXXXXXXX. XXXXXXX XXXXX XXXX XXXXXXXXXXX. XXXXXXX XXXXX XXXX XXXXXXXXXXX. XXXXXXX XXXXX XXXX XXXXXXXXXXX.

13:30	<div><div>● Bernadia Irawati Tjandradewi Secretary General of the United Cities and Local Governments Asia Pacific (UCLG ASPAC)</div><div>[Moderator]</div><div>● Yatsuka Kataoka Joint-Programme Director, City Taskforce, IGES</div><div>Part2</div><div>[Speakers]</div><div>● Eriko Yakushiji Director General of Climate Change Policy Headquarters, City of Yokohama</div><div>● Yuki Kawahara President, Taiyo Jyuden Co. Ltd.</div><div>● Termsiri Chongpoonphol Director, Air Quality and Noise Management Division, Department of Environment, BMA</div><div>● Tadashi Matsumoto Head of Unit, Sustainable Development and Global Relations, Centre for Entrepreneurship, SMEs, Regions and Cities, Organisation for Economic Co-operation and Development (OECD)</div><div>[Moderator]</div><div>● Shiko Hayashi Programme Director, Kitakyushu Urban Centre, IGES</div></div>	<div>● Asako Osaki National Coordinator, WE EMPOWER JAPAN</div> <div>[Moderator]</div> <div>● Nobue Amanuma Senior Policy Researcher, Sustainability Governance Centre, IGES</div>	<div>[Moderator]</div> <div>● Kazunobu Onogawa Director, The IGES Centre Collaborating with UNEP on Environmental Technologies (CCET)</div>		
13:30–15:00 90 minutes break					
15:00	<div>Thematic Tracks</div> <div><div><div>Social Implementation of the Regional Circular and Ecological Sphere Initiative in Japan</div><div>TT5 ♡ F201–204</div><div>[Speakers]</div><div>● Ryuichi Yamamoto Deputy Director, Climate Change Policy Division, Environment Management Bureau, Hyogo Prefectural Government</div><div>● Yasuko Inoue CEO, Takarazuka Sumire Electric Power Co., Ltd.</div><div>● Daisuke Utsunomiya Researcher, Suzu City, Ishikawa Prefecture</div><div>● Mayumi Taka Community coordinator, Suzu City, Ishikawa Prefecture</div><div>[Moderators]</div><div>● Kazuhiko Takeuchi President, IGES</div><div>● Toshizo Maeda Programme Director, Kansai Research Centre, IGES</div></div><div><div>Towards New Paradigms in Urban-Rural Linkages: Fostering Innovations for Sustainable Resource Management and Collective Resilience</div><div>TT6 ♡ F205</div><div>[Opening Remarks]</div><div>● Kazuhiko Takeuchi President, IGES</div><div>[Speakers]</div><div>● Rajib Shaw Professor, Graduate School of Media and Governance, Keio University</div><div>● Tomoko Takeda Policy Researcher, Natural Resources and Ecosystem Services Unit, IGES</div><div>● Sameer Deshkar Assistant Professor, Architecture & Planning, Visvesvaraya National Institute of Technology, India</div><div>● Makoto Ishigouoka Group Leader, Water Source Environment Conservation Division Environment and Agriculture Bureau, Kanagawa Prefectural Government</div><div>● Bijon Kumer Mitra Senior Policy Researcher, Natural Resources and Ecosystem Services Unit, IGES</div><div>● Hassan Virji Professor, International Development and Cooperation, Hiroshima University</div></div><div><div>Next Step of ESD for Achieving the SDGs</div><div>T7 ♡ F206</div><div>[Speakers]</div><div>● Anantha Duraipappah Director, UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP)</div><div>● Yuto Kitamura Associate Professor, Graduate School of Education, University of Tokyo</div><div>● Ushio Miura Programme Specialist, UNESCO Bangkok Office - Asia and Pacific Regional Bureau for Education, UNESCO</div><div>● Yoko Mochizuki Head of Programme, Rethinking Policy, UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP)</div><div>● Masahisa Sato Professor, Faculty of Environment, Tokyo City University</div><div>[Moderator]</div><div>● Mario Tabucanon Senior Visiting Professor, UN University Institute for the Advanced Study of Sustainability (UNU-IAS)</div></div></div>			15:00	<div>Technical Workshop 1</div> <div><div>Efficient Use of Organic Waste and its Treatment Technology</div><div>TW1 ♡ E206</div><div>[Speakers]</div><div>● Yosuke Koga Section Chief, Biomass Circular Resources Division, Food Industry Bureau, MAFF</div><div>● Yasunori Kawai Manager, Innovation center, AISIN SEIKI Co., Ltd.</div><div>● Yoshiyasu Okaniwa Executive director, Biogas Process Council</div><div>● Masaru Yamaoka Leader, Aquatic Environmental Engineering Unite Hydraulic Engineering Research Division, Institute for Rural Engineering, NARO (National Agriculture and Food Research Organization)</div><div>[Moderator]</div><div>● Kazunobu Onogawa Director, The IGES Centre Collaborating with UNEP on Environmental Technologies (CCET)</div></div>

16:30	<ul style="list-style-type: none"> ● Nanda Jichkar Mayor, Nagpur Municipal Corporation [Moderator] ● Andre Mader Programme Director, Natural Resources and Ecosystem Services Unit, IGES <p>Organised by: Institute for Global Environmental Strategies (IGES), Keio University and Visvesvaraya National Institute of Technology</p> <p>Supported by: Japan Society for the promotion of Science (JSPS) and Indian Council of Social Science Research (ICSSR)</p>	17:30
16:30–17:00 30 minutes break		
17:00	Plenary Session 2 ISAP2019-ENVforum Joint Session: The Role of Consumers in Triggering Changes in Consumption & Production	P2 ♣ F201–204
18:00	<p>[Rapporteurs]</p> <ul style="list-style-type: none"> ● Grazyna Pulawska Senior Project Manager, Asia-Europe Foundation (ASEF) ● Yasuhiko Hotta Director, Sustainable Consumption and Production, IGES ● Riko Kimoto Project Manager, Sustainable Development & Public Health Department, Asia-Europe Foundation (ASEF) ● Atsushi Watabe Research Manager, Sustainable Consumption and Production, IGES <p>[Experts' Commentary]</p> <ul style="list-style-type: none"> ● Dechen Tsering Director, Asia and the Pacific Office, UN Environment (UNEP-ROAP) ● Lukáš-Pokorný Head of International Organisations Unit, Department of International Relations, Ministry of Environment of the Czech Republic <p>[Moderator]</p> <ul style="list-style-type: none"> ● Grazyna Pulawska Senior Project Manager, Asia-Europe Foundation (ASEF) <p>[Closing Remarks]</p> <ul style="list-style-type: none"> ● Sun Xiangyang Deputy Executive Director, Asia-Europe Foundation (ASEF) ● Hideyuki Mori Executive Director, IGES 	

DAY2: Wednesday, 31 July

9:30	Plenary Session 3 Role of Policy-Oriented Research for Integrated Climate and Development Policies	P3 ♣ F201–204
	<p>[Opening Remarks]</p> <ul style="list-style-type: none"> ● Kazuhiko Takemoto Director, United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS) <p>[Keynote Presentation]</p> <ul style="list-style-type: none"> ● Albert Van Jaarsveld Director General and CEO, International Institute for Applied Systems Analysis (IIASA) <p>[Moderator]</p> <ul style="list-style-type: none"> ● Hideyuki Mori Executive Director, IGES 	
	Integrating Climate Change and the Sustainable Development Goals (SDGs) in Asia: How Can the Link be Strengthened?	
11:00	<p>[Framing Presentation]</p> <ul style="list-style-type: none"> ● Zhou Xin Research Leader, Strategic and Quantitative Analysis Centre, IGES <p>[Speakers]</p> <ul style="list-style-type: none"> ● Albert Van Jaarsveld Director General and CEO, International Institute for Applied Systems Analysis (IIASA) ● Dechen Tsering Director, Asia and the Pacific Office, UN Environment (UNEP-ROAP) ● Yoon Jeyong President, Korea Environment Institute (KEI) ● Chiho Watanabe Chief Director, National Institute for Environmental Studies (NIES) ● Eklabya Sharma Deputy Director General at the International Centre for Integrated Mountain Development (ICIMOD) <p>[Moderator]</p> <ul style="list-style-type: none"> ● Eric Zusman Research Leader, Sustainability Governance Centre, IGES 	
11:00–11:30 30 minutes break		

11:30	Thematic Tracks			
13:00	<p>Ways forward for building climate resilient societies in the Asia-Pacific Region and the role of AP-PLAT as a regional flagship initiative</p> <p>TT9 ♡ F205</p> <p>[Speakers]</p> <ul style="list-style-type: none"> ● Mimi Nameki Deputy Director, Center for Climate Change Adaptation, National Institute for Environmental Studies ● Naoya Tsukamoto Director, Regional Resource Centre for Asia and the Pacific (RRC.AP), Asian Institute of Technology ● Peter King Senior Policy Advisor, IGES ● Wijarn Simachaya Permanent Secretary of the Ministry of Natural Resources and Environment, Thailand ● Jinhua Zhang Regional Coordinator, Environment under Review Programme, Regional office for Asia and the Pacific, UN Environment Programme ● Eklabya Sharma Deputy Director General at the International Centre for Integrated Mountain Development (ICIMOD) ● Putra Dwitama Head of RAN API (National Action Plan on Climate Change Adaptation) Secretariat, Ministry of National Development Planning, Indonesia ● Yasuo Takahashi Special Advisor, Ministry of the Environment, Japan (MOEJ) <p>[Moderator]</p> <ul style="list-style-type: none"> ● Osamu Mizuno Principal Fellow, Strategic Management Office, IGES 	<p>Communications for Science-based Decision-making</p> <p>TT10-1 ♡ F201-204</p> <p>[Speakers]</p> <ul style="list-style-type: none"> ● Dechen Tsering Director, Asia and the Pacific Office, UN Environment (UNEP-ROAP) ● Albert Van Jaarsveld Director General and CEO, International Institute for Applied Systems Analysis (IIASA) ● Shuzo Nishioka Counsellor, IGES ● Yusuke Matsuo Programme Director, Business Taskforce, IGES ● Togo Uchida Executive Director, ICLEI Japan ● Erina Imai Joint Representative, Climate Youth Japan ● Konoe Fujimura Green Alliance Japan <p>[Moderator]</p> <ul style="list-style-type: none"> ● Takashi Otsuka Joint-Director of Knowledge and Communications, IGES 	<p>G20 Ministerial Meeting on Energy and Environment 2019 –Its Significance and Outlook–</p> <p>TT11 ♡ F206</p> <p>[Speakers]</p> <ul style="list-style-type: none"> ● Hiroshi Ono Director General, Environmental Management Bureau, Ministry of the Environment, Japan ● Kazuhiko Takeuchi President, IGES ● Satoshi Kojima Principal Coordinator, Research and Publications Unit, Strategic Management Office, IGES ● Yoriko Meguro Co-president, W20 <p>[Moderators]</p> <ul style="list-style-type: none"> ● Mark Elder Director of Research and Publications, Research and Publications Unit, Strategic Management Office, IGES ● Tsuyoshi Kawakami Principal Fellow, Strategic Management Office, IGES 	<p>Progress of China-Japan-Korea Joint Research Project on Cities Towards Decarbonisation and Sustainable Development</p> <p>TT12 ♡ Harbor Lounge B</p> <p>[Welcome Remarks]</p> <ul style="list-style-type: none"> ● Keiko Segawa Deputy Director General, Global Environment Bureau, Ministry of the Environment, Japan <p>[Opening Remarks]</p> <ul style="list-style-type: none"> ● Zhen Sun Deputy Director General, Department of Climate Change, Ministry of Ecology and Environment ● Sang In Kang Chief Research fellow, International Cooperation, Korea Environment Institute (KEI) <p>[Speakers]</p> <ul style="list-style-type: none"> ● Yoon Jeyong President, Korea Environment Institute (KEI) ● Kenya Katayama Mayor of Niseko Town ● Dong Wang Director, Shenzhen Research Centre on Climate Change ● Fen Li Chief Engineer, R&D center, Shenzhen Institute of Building Research Co., Ltd ● Kim Jin Young Director for Asia, Global Green Growth Institute (GGGI) ● Sangmin Nam Deputy Head, East and North –East Asia Office, UNESCAP <p>[Moderators]</p> <ul style="list-style-type: none"> ● Xiu Yang Senior Researcher, National Center for Climate Change Strategy and International Cooperation (NCCS) ● Junichi Fujino Programme Director, City Taskforce, IGES
13:00–15:00 120 minutes break				

Thematic Tracks				
13:00	<p>“Asian Industrialisation as a Source of Emerging Pollutants and Environmental Impacts” –Launch Session of Global Environmental Outlook 6 for Industry in Asia and the Pacific–</p> <p>TT10-2 ♡ F201-204</p>	13:15	<p>>Lunch Time Session</p> <p>What is Transition Management/ Governance toward a Decarbonised Society?</p> <p>TT13 ♡ F206</p>	<p>>Lunch Time Session</p> <p>How to Track the Progress of NDC –Approach of Multi-layer PDCA-cycles</p> <p>TT14 ♡ Harbor Lounge B</p>
	<p>[Speakers]</p> <ul style="list-style-type: none">● Dechen Tsering Director, Asia and the Pacific Office, UN Environment (UNEP-ROAP)● Peter King Senior Policy Advisor, IGES● Girish Sethi Senior Director, Energy Program, The Energy and Resources Institute (TERI)● So-Young Lee Research Manager, Sustainability Governance Centre, IGES● Ngoc-Bao Pham Senior Policy Researcher, Natural Resources and Ecosystem Services Unit, IGES● Andre Mader Programme Director, Natural Resources and Ecosystem Services Unit, IGES <p>[Moderator]</p> <ul style="list-style-type: none">● Tetsuo Kuyama Programme Director, Regional Centre in Bangkok, IGES		<p>[Speakers]</p> <ul style="list-style-type: none">● Kentraro Tamura Research Leader, Climate and Energy Area, IGES● Akihisa Kuriyama Policy Researcher, Strategic and Quantitative Analysis Centre, IGES <p>[Via live video link]</p> <ul style="list-style-type: none">● Derk Loorbach Director, Dutch Research Institute for Transitions (DRIFT), Erasmus University <p>[Moderator]</p> <ul style="list-style-type: none">● Mikiko Kainuma Senior Research Advisor, IGES	<p>[Speakers]</p> <ul style="list-style-type: none">● Naoki Matsuo Principal Policy Researcher, Research and Publications Unit, Strategic Management Office, IGES● Ajay Mathur Director General of TERI –The Energy & Resources Institute, and a member of the Prime Minister’s Council on Climate Change● Noboru Yumoto Energy and Environment Institute, Inc. CEO
13:45		14:45		

15:00	Plenary Session 4 Collaborative Action for Climate Change [Speakers] ● Sandrine Dixon-Declève Co-President, Club of Rome ● Yuji Mizuno Director, Climate and Energy Area, IGES ● Ajay Mathur Director General of TERI – The Energy & Resources Institute, and a member of the Prime Minister's Council on Climate Change [Moderator] ● Tsuyoshi Kawakami Principal Fellow, Strategic Management Office, IGES			P4 ♡ F201–204
16:00	16:00–16:20 20 minutes break			
16:20	Thematic Tracks			
	Approaches for Transferring Low-carbon Technologies in Developing Asia TT15 ♡ F201-204	Mid Century Strategies in Japan and the EU under the Paris Agreement: Challenges and Strengthening Efforts for Achieving a Decarbonised Society TT16 ♡ F205	How to Enable Constructive Discussion on Carbon Pricing TT17 ♡ F206	
	[Speakers] ● Ajay Mathur Director General of TERI – The Energy & Resources Institute, and a member of the Prime Minister's Council on Climate Change ● Ryuzo Sugimoto Director, International Cooperation and Sustainable Infrastructure office, Global Environmental Bureau, Ministry of the Environment, Japan	[Speakers] ● Tsuyoshi Kawakami Principal Fellow, Strategic Management Office, IGES ● Diego Silva Herran Fellow, IGES ● Nobuhiro Kino Director, Low-Carbon Society Promotion Office, Ministry of the Environment, Japan	[Speakers] ● Yukari Takamura Professor, Integrated Research System for Sustainability Science (IR3S), The University of Tokyo Institutes for Advanced Study (UTIAS) (t.b.c) ● Suk Sunhee Associate Professor, Faculty of Environmental Science Graduate School of Fisheries and Environmental Sciences Nagasaki University	

17:50	<ul style="list-style-type: none"> ● Motohiro Washimi General Manager, International Research & Communication Department, The Energy Conservation Center, Japan (ECCJ) ● Gen Takahashi General Manager, Business Development, JFE Engineering Co., Ltd. ● Tsukasa Saito IGES Fellow (former Hitachi Industrial Equipment Systems Co., Ltd.) <p>[Moderators]</p> <ul style="list-style-type: none"> ● Toshizo Maeda Programme Director, Kansai Research Centre, IGES ● Yutaka Suzuki Director, IGES Kansai Research Centre 	<ul style="list-style-type: none"> ● Georgios Zazias Energy Analyst and Modeller, E3-Modelling P.C. ● Olivia Gippner Policy Officer, Economic Assessment and Strategy, European Commission Directorate General for Climate Action <p>[Moderator]</p> <ul style="list-style-type: none"> ● Masahiro Sugiyama Associate Professor, Institute for Future Initiatives, University of Tokyo 	<ul style="list-style-type: none"> ● Naoki Matsuo Principal Policy Researcher, Research and Publications Unit, Strategic Management Office, IGES ● Satoshi Kojima Principal Coordinator, Research and Publications Unit, Strategic Management Office, IGES <p>[Moderator]</p> <ul style="list-style-type: none"> ● Shuzo Nishioka Counsellor, IGES
17:50–18:00 10 minutes break			
18:00	Closing Plenary CL ♡ F201–204		
	Takeaway and way forward		
18:30	<p>[Speakers]</p> <ul style="list-style-type: none"> ● Hideyuki Mori Executive Director, IGES ● Naoki Mori Executive Coordinator / Director of Knowledge and Communications, IGES 		

Concurrent event

9:00	Technical Workshop 2 TW2 ♡ E206
11:00	Youth Session Youth Actions towards the Tokyo 2020 Games

