

ISAP 2012

International Forum for Sustainable Asia and the Pacific: ISAP
24-25 July 2012



Steering towards a sustainable and resilient future:
Beyond Rio+20



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**Steering towards a sustainable and resilient future:
Beyond Rio+20**

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



What is ISAP?

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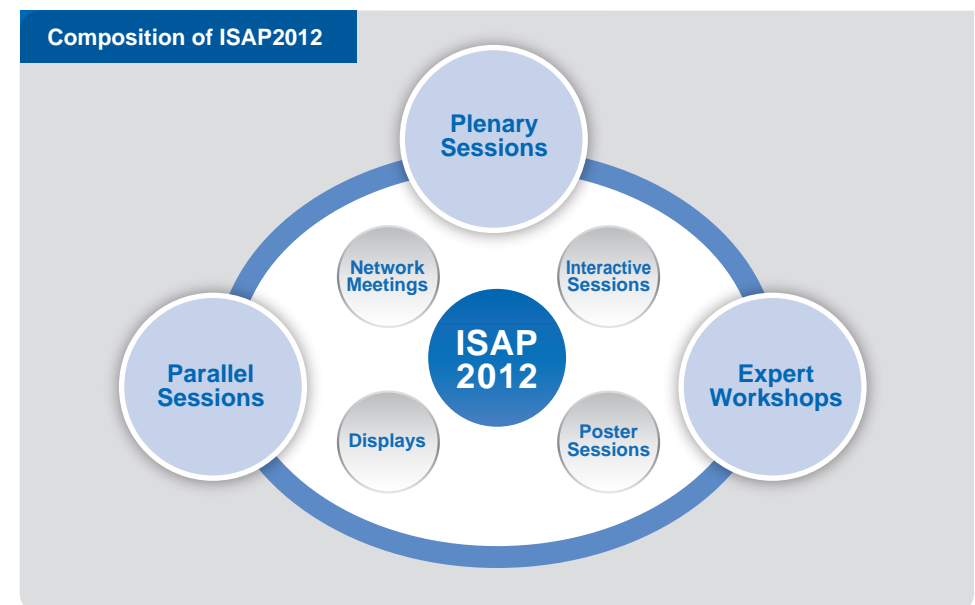
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Professional affiliations and titles are correct at the time of the forum.

IGES launched the **International Forum for Sustainable Asia and the Pacific (ISAP)** in June 2009, to promote discussions on sustainable development in Asia and the Pacific and to provide opportunities to boost information-sharing and strengthen collaborative efforts with front-line experts and diverse stakeholders from international organisations, governments, business and NGOs, drawing upon the international/regional networks in which IGES plays a major role.

ISAP2012 consisted of the three main components: i) **Plenary Sessions**, ii) **Parallel Sessions**, and iii) **Expert Workshops**. In addition, ISAP2012 hosted a number of network meetings, displays for research outputs and poster sessions for university students to show their work; and **Interactive Sessions** which gave young researchers the opportunity to interview prominent figures from government, business, and international organisations. All Plenary Sessions were shown live on Ustream and are now available on the IGES YouTube page. This comprehensive structure is designed to allow for opportunities to share information and promote a sustainability agenda in Asia and the Pacific through discussions and networking among participants.



Event Outline

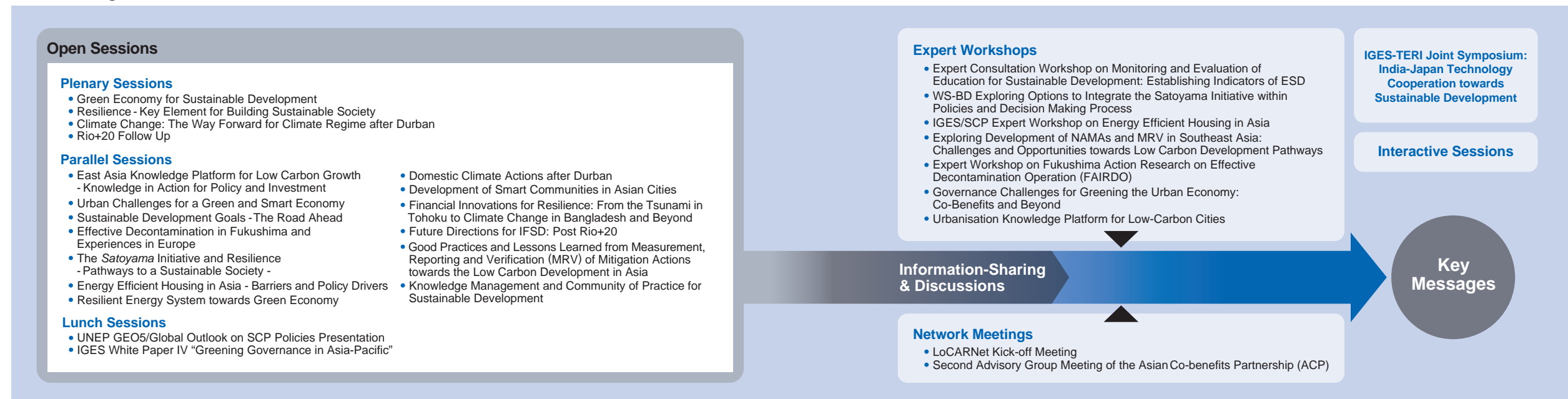
The year 2012 will be a turning point in the journey towards sustainable development. The process leading up to the UN Conference on Sustainable Development (Rio+20) in June promoted diverse global discussions on transformational issues for building a sustainable and resilient future.

From 24-25 July this year ISAP2012 was convened under the umbrella theme of “Steering towards a sustainable and resilient future”. Held just one month after Rio+20, ISAP2012 was the first major public forum in the region to discuss the outcomes and future actions which will be important for Asia-Pacific and the world. In addition, discussions were held on the implications of the triple disasters in Japan in 2011 – in particular the impact of the nuclear disaster in Fukushima. Participants reflected on resilience and the outlook of our current political, economic, and social systems, especially in the context of climate change and development trends.

Plenary sessions were held on four timely issues – follow-up to the Rio+20 conference, climate change, resilience, and green economy, in addition to numerous side sessions. ISAP2012 also served as a platform to introduce new publications - the fourth IGES White Paper entitled “Greening Governance in Asia-Pacific” as well as two publications from UNEP with contributions from IGES researchers - the fifth Global Environmental Outlook (UNEP/GEO5) and the Global Outlook on Sustainable Consumption and Production (SCP) Policies.

Date	24-25 July 2012 (Tue./Wed.)
Venue	PACIFICO YOKOHAMA, Conference Center 5F (1-1-1 Minato Mirai, Nishi-ku, Yokohama, Japan)
Organisers	Institute for Global Environmental Strategies (IGES) United Nations University Institute of Advanced Studies (UNU-IAS)
Collaborators	United Nations Environment Programme (UNEP) United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) Asian Development Bank (ADB)
Supporters	Ministry of the Environment, Japan / Kanagawa Prefectural Government / Hyogo Prefectural Government / City of Kitakyushu / City of Yokohama / Kawasaki City / Global Cooperation Institute for Sustainable Cities, Yokohama City University / Graduate School of Media and Governance, Keio University / Yokohama National University / National Institute for Environmental Studies (NIES) / The Energy and Resources Institute (TERI) / Nikkei Inc. / Nikkei BP Cleantech Institute
Number of Participants	About 1,100 persons (including pre-events)

ISAP2012 at a glance



Message from the Chair

Chair

Prof. Hironori Hamanaka

Chair of the Board of Directors, IGES

Since ISAP began in 2009 it has evolved to become more than just an annual forum for sharing research outcomes, but a process where each yearly event is a reflection on progress on critical issue under sustainable development. ISAP has also become an opportune stage for understanding the meaning and implications to the Asia-Pacific region of outcomes at the international level such as the climate change negotiation and the Rio+20 process.

It has also become a forum for understanding significant events of our times, in particular the 3.11 disaster, by bringing together experts from around the world to discuss solutions to the challenges these events present. Moreover, ISAP provides a good opportunity to develop specific partnerships among its participants, and to strengthen various networking activities. For this we are truly grateful to the invited speakers for sharing their insights and to the audience for their participation by asking challenging questions.

One word that was often mentioned at ISAP2012 was *local*. It is easy to say that we need to emphasise actions on the ground, but the enabling environment for this is created by the national governments whose role is to develop policies supporting, for example, institution building, capacity development and funding. National governments can also support the development of resilience through infrastructure and systems, such as energy systems and regulatory oversight, but resilience is also a function of social factors, in particular poverty, inequality, social capital, and participation.

Ultimately, phasing out nuclear seems to be almost unanimous, the question is how and on whose timeline. Reducing carbon intensity is required for climate protection and is an essential condition for a successful energy transition, as is the case for energy security and economic competitiveness. These questions we could only touch on at ISAP, although IGES has published a policy report on this topic entitled *Lessons Learnt from the Triple Disaster in East Japan*. But what we heard at ISAP this year is that however much of a technological challenge we face the overarching challenges are social – the social acceptability of technology and participation. In particular trust among the people and the government, but also, for the government to believe in the people and their role in governance.

I would like to wholeheartedly thank our collaborating organisations and the invited speakers and audience members who made this year's event so meaningful. We truly appreciate your kind cooperation and contributions to ISAP.

Opening Remarks

Welcome Remarks

Prof. Hironori Hamanaka, Chair of the Board of Directors, IGES

Guest Remarks

Mr. Tatsushi Terada, Vice-Minister for Global Environmental Affairs,
Ministry of the Environment, Government of Japan

Mr. Masao Kurokawa, Vice Governor, Kanagawa Prefectural Government

Welcome Remarks

Prof. Hamanaka officially began ISAP2012 with remarks welcoming the invited guests, speakers, panellists, and audience members, thanking them for contributing to ISAP and expressing his hope for their active participation in the discussions.

Guest Remarks

Mr. Terada expressed appreciation to the global community for the support received after the disaster last year and emphasised that Japan plans to continue its commitments for development and cooperation. In recognition of events such as ISAP he noted that the sustainability of Asia-Pacific requires informed debate to come up with timely and effective policy recommendations.

Mr. Kurokawa shared with the audience about how representatives from Kanagawa Prefecture went to Rio de Janeiro in 1992 as members of the local government segment of Major Groups. Kanagawa was the first prefecture to establish a Local Agenda 21. Kanagawa wants to lead the energy revolution in the nation and has implemented a number of initiatives including the Smart Energy Initiative.



Plenary Sessions

Plenary Session 1

GREEN ECONOMY FOR SUSTAINABLE DEVELOPMENT

Session Outline & Objectives

Following the Rio+20 process, a green economy is now recognised as an important tool for operationalising sustainable development. Positive expectations include, at the very least, bringing together the environmental and economic pillars, and in so doing green economy can also contribute to poverty eradication – such as through creating sustainable, or green, employment and decent work. On the other hand, there are concerns about risks that need to be carefully avoided, for example, the concept and practices of a green economy could act as barriers to accessing financing and international trade due to limited access to technology and capacity gaps. This session looked at how the global trend for shifting towards a green economy affects decisions and actions taken by countries and organisations in relation to climate change, energy security, and funding.

List of Speakers

[Moderator]

Prof. Hironori Hamanaka, Chair of the Board of Directors, IGES

[Keynote Speakers]

Dr. Rajendra K. Pachauri, Director-General, The Energy and Resources Institute (TERI) / Chair, The Intergovernmental Panel on Climate Change (IPCC)

Dr. Bindu N. Lohani, Vice President, Knowledge Management and Sustainable Development, Asian Development Bank (ADB)

[Discussant]

Dr. Naoko Ishii, Deputy Vice Minister of Finance for International Affairs, Ministry of Finance, Government of Japan

Key Messages

- **Climate science is at the heart of sustainable policy making as it will exacerbate poverty and act as a threat multiplier.**
- **The concept of a green economy needs clarification to gain widespread acceptance, and part of that clarification will come as countries adopt green growth strategies and find success in the green economy.**
- **Governments reached agreement on global priorities for action, but other stakeholders including research institutes and NGOs from Major Groups will play a leading role in finding solutions on how to take action.**
- **Many ideas and funding options exist but what is lacking is a comprehensive framework or organisation for orienting action in a unified manner.**

Summary

Dr. Pachauri's presentation drew parallels between the 1992 United Nations Conference on Environment and Development and the 2012 United Nations Conference on Sustainable Development (Rio+20), stating that while attendance by heads of state was much less in 2012 the outcomes have potential to have as great an impact as the outcomes from 1992. In the 2012 outcome document The Future We Want, climate change was reaffirmed as one of the greatest challenges of our times and commented that "to ignore actions on climate change is to ignore our desire to move towards a path of sustainable development". Climate science is at the heart of sustainable policy making, he said, as it will exacerbate poverty and act as a threat multiplier. He acknowledged that preventing disasters is an important part of sustainable development and indicated the linkages between resilience and adaptation, but he stated there are limits to resilience and relying on adaptation without giving due attention to preventing problems in the first place through mitigation action because if we delay emissions reduction, the impacts will be greater. He finished by saying that while the green economy was hotly debated at Rio+20, the discussions indicate that the world will pay attention to this topic in the years ahead.

Dr. Lohani stated that the value of a green economy to sustainable development was clear, and just as each country will have to find its own way to a green economy so too will each organisation. However he acknowledged that clarity is often lacking in the discourse on green economy and so some countries remain skeptical of the concept. However, he stated that the reality is that traditional development planning needs to be oriented to sustainable development and the green economy. Asia, he stated, is at the forefront of green economy and green growth, and major countries are developing plans and finding success in the green economy – for example Japan with energy efficiency and China by focusing on the solar market, while Republic of Korea and India have developed comprehensive action plans. Although ADB's main priority is poverty reduction more than half of its investments are into environmental projects. Many funds are for climate projects, but he felt there need to be more concessional funds to help get some new projects and ideas off the ground. His final point was in support of "knowledge-led growth", especially for middle-income countries to move to the "next level" and be a part of the knowledge economy. However not enough is known about using knowledge as a part of the green economy. Asia needs a new growth path and Asian countries are realising that fast growth in the wrong direction is not good.

Dr. Ishii focused her commentary on two aspects – first her reflections on Rio+20 and then the role of financial institutions such as the Asian Development Bank and Global Environment Facility. She observed that the Rio+20 conference had two very different worlds – a world for government officials inside the negotiating rooms, and another more active and interesting world in the corridors and event spaces with major groups and other stakeholders. She acknowledged there were some good results like agreement to start a process for Sustainable Development Goals, but the talks were typified by suspicions and political rhetoric. She felt there is a need for clear recognition and political will to incorporate natural capital into decision-making. However she cautioned that we cannot wait for the central government to save us, rather other stakeholders such as the research community and NGOs need to play a role in finding solutions on how to take action. On the role of financial institutions, they provide resources to promote green growth and sustainable development with innovative ideas and ways of doing business. There is no lack of ideas, she said, but a lack of idea on how to combine them and orient them in the same direction. A lot of funds are available, but those funds do not add up to more than the sum of the parts right now because of a lack of an overall framework that everyone is working within.



Plenary Session 2

RESILIENCE: KEY ELEMENT FOR BUILDING SUSTAINABLE SOCIETY

Session Outline & Objectives

Resilience has been identified as one of the key elements of sustainable development. Recovery from the triple disasters in the Tohoku region of Japan, including Fukushima, remains an enormous challenge, while many Asian countries face the urgent need to enhance resilience for diverse issues including climate change adaptation. The speakers in this session reflected on the topic of resilience in relation to sustainable development and disasters to identify critical elements for building and sustaining a resilient society.

List of Speakers

[Moderator]

Mr. Kazuhiko Takemoto, Senior Advisor to Minister of the Environment / Senior Fellow, United Nations University Institute of Advanced Studies (UNU-IAS)

[Keynote Speakers]

Prof. Dr. Klaus Töpfer, Executive Director, Institute for Advanced Sustainability Studies e.V. (IASS)

Prof. Kazuhiko Takeuchi, Vice Rector, United Nations University (UNU)

Ms. Tomoko Nishimoto, Director, Division of Regional Cooperation (DRC), United Nations Environment Programme (UNEP)




Key Messages

- **Poverty is the major contributor to vulnerability and therefore undermines resilience; likewise access to energy is a vital factor to alleviating poverty. Therefore energy is a critical factor for resilience.**
- **Short-term thinking limits options to only those available “right now”, which undermines sustainability and resilience by excluding options such as renewable energy and impacts on future generations.**
- **The post-disaster period is an opportunity for reassessing conditions and rebuilding under a more sustainable and resilient model.**
- **Building resilience depends on the government establishing the enabling conditions for resilient infrastructure and systems in cooperation with local governments and public participation, but also on social factors among individuals and communities which are built over time on trust and cooperation. Together these contribute to a resilient national character and faith in the future.**

Summary

Prof. Dr. Töpfer visited the areas in Fukushima affected by the nuclear accident just prior to ISAP2012, an experience he found to be valuable and important. From his UNEP days in Africa, he felt that the first condition of poverty is energy poverty, and as such he identified energy as a critical factor for resilience in terms of how it is produced, how it is consumed, and who has access to energy. The common denominators of the current crisis and what undermines societies' resilience were short-term thinking which leads to limiting our options to those most easily available right now rather than the most sustainable options. In his opinion sustainable development means prolonging the decision-making perspective so as to account for medium-long term consequences because the shorter the timeframe, the fewer the alternatives available. This tends to exclude options such as renewable energy which are still in the nascent stages of development. The challenges he identified were not just gross numbers of people in the world but what they are doing, and more and more people are living as middle class consumers which is leading to a more difficult and expensive situation for accessing fossil fuels. At his institute the main question they are pursuing is how to close the carbon cycle by making CO₂ an asset and not a liability. For example carbon capture and storage treats carbon as waste, which means it is not on the sustainability track. Regarding nuclear energy he referred to it as “the dream that failed”, citing articles from *The Economist* 26 years ago and from this year which first promoted nuclear on the condition it can establish a safe track record – which it has not. So now it is “no longer commercially feasible” despite subsidies. The other challenge he presented was how to integrate renewable energy in energy markets. This discussion was based on the “big question” of when renewable energy will be cheap enough for Africans to afford, a sort of measuring stick for success. In



summary he highlighted a few important messages, notably that society should stick to a climate protection strategy when searching for energy options, the fact that there is a strong need for participation of the public and civil society from the very beginning, and to consider the “greatest acceptable accident” for energy options – comparing the consequences of a broken solar panel to a nuclear accident.

Prof. Takeuchi focused his presentation on the disaster recovery of Tohoku in northeastern Japan, basing his message on case studies of communities that are rebuilding with a strong focus on the relationship between society and nature. The region is struggling with how to rebuild when the local economy is dependent on primary industries and the context is changing due to social trends such as ageing population, urban migration, and overseas competition. If the rebuilding is successful he felt the Tohoku recovery model could be applied to other parts of Japan that have similar demographics. At issue are traditional land and resource use rights, which must be respected, but ultimately it is not realistic to return to pre-disaster conditions. Other stakeholders can be involved to reestablish the system as one which reflects modern conditions and thinking such as sustainability. For this he stated there is a need for a new type of business model based on natural capital and that rebuilding should be done on the basis of the Satoyama and Satoumi initiatives which encourage harmony between human settlements and land use. The linkage between forest–river–sea provides the community with the benefits of nature while also protecting against natural hazards such as by creating tree-barriers along the coast. He shared a few points for sustainable post-disaster rebuilding including viewing the post-disaster time as an opportunity for building a sustainable society which can serve as a model for a green economy, and these experiences should be shared with the world.

Ms. Nishimoto stated that resilience is increasingly being recognised by policy makers and experts but the question is how capacity for resilience can be reinforced. She explained that there are no simple answers as it depends on the local context, in particular the social context. Her presentation then focused on two aspects of resilience in a given society – the role of government and that of the individual and community. Nurturing resilience is an iterative process between stakeholders such as central and local government, but also among communities where resilience is developed within a culture over time. Governments can foster resilience through planning to ensure robustness of infrastructure and alternatives in time of disaster. However what she called “deep-seated resilience” is that which empowers people to spontaneously help others and stoically bear losses and is a social characteristic which cannot be expected to form based on governmental plans. She felt Japan is a good example of this with “well honed emergency services” operating within the context of many inspiring scenes of coping and recovery by individuals and communities. A major challenge was, and still is, handling post-disaster waste, and she said that much can be learned from the Japanese experience. UNEP was invited to Japan during the early stages of the waste-management process, and lessons learned included how local governments' contingency plans allowed them to respond faster. Additionally, commendable progress was made due to assistance by technology – a good example of how good planning and technological know-how go hand in hand for a quick recovery. Overall the disaster situation “prompted deep public reflection” in Japan and other countries on sustainability and many have seized the opportunity to promote green buildings and environmentally sustainable cities.

Plenary Session 3

CLIMATE CHANGE: THE WAY FORWARD FOR CLIMATE REGIME AFTER DURBAN

Session Outline & Objectives

This plenary session drew on the outcomes of the United Nations Framework Convention on Climate Change (UNFCCC) 17th Conference of parties (COP17) in Durban with critical reflection on a selection of the significant issues from Durban facing the international community. The issues addressed included how to motivate ambition on mitigation efforts to hold the global average temperature rise to below 2 degrees Celsius; how to address the issue of equity and Common but Differentiated Responsibility and respective capacity (CBDR/RC); and discussion of the emissions gap based on a UNEP publication.

List of Speakers

[Moderator]

Prof. Akio Morishima, Chair of the Board of Directors, Japan Climate Policy Center

[Keynote Speakers]

Dr. Young-Woo Park, Regional Director & Representative for Asia and the Pacific, United Nations Environment Programme, Regional Office for Asia & the Pacific (UNEP-ROAP)

Mr. Tom Athanasiou, Executive Director, EcoEquity

[Discussant]

Prof. Katsunori Suzuki, Director & Professor, Environment Preservation Center, Kanazawa University



Key Messages

- A gap exists between what has been pledged based on the Copenhagen Accord and what is actually needed to keep global warming at or below 2C.
- Equity is a critical factor for reaching a breakthrough in climate negotiation; while all countries, including developing countries, must have a sufficient share of the limited remaining greenhouse gas budget, supporting development needs is essential in order to realise this in a way which does not compromise poverty eradication and legitimate development needs.
- In the short-term it might be difficult to limit global mean temperature rise to within 2C from pre-industrial level only with conventional GHG mitigation actions. Therefore, addressing mitigation of short-lived climate forcers (SLCFs) will reinforce mitigation actions as a co-control method, bringing both climate and development benefits on the ground.

Summary

Dr. Park based his presentation on a UNEP publication called 'The Emissions Gap Report' written by 30 leading scientists and research centres in 2010. The presentation focused very much on the technical details of the report, which was drafted in response to the pledges made by governments to limit global warming to 1.5C or 2C as described in the Copenhagen Accord. The "emissions gap" is the difference between what is needed to meet this target and what was pledged by governments, according to UNEP's analysis. The main conclusion is that a gap between what needs to be done to keep within the 2C limits and what has been pledged by countries. The Report found that under the business-as-usual scenario, the gap will be quite large, but even if the most ambitious pledges are taken through adopting, for example, more strict rules of land use and forest accounting, there is still a troubling emission gap. Although this gap is considerably narrower than business as usual, it is still as large as the total gas emissions from the EU in 2005. The main options for reducing the gap will be increasing ambition of country targets, outperforming national emissions, taking measures in sectors not covered by national targets. In addition to these longer-term measures, the report recommends addressing short lived climate forcers (i.e. black carbon).



Mr. Athanasiou based his talk on the concept of equity, which he posited is a fundamental issue in sustainable development and a key to reaching a breakthrough in the climate negotiations. Given the urgent situation of climate change he stated we need to achieve at least the 2C limit, but we are still on a pathway to 4C or 6C increase. Achieving the 2C limit necessitates three equity considerations from the point of view of climate negotiation: the adequacy principle; Common but Differentiated Responsibility (CBDR) and Respected Capacity (RC); and the right to sustainable development. His message was that there is much confusion and controversy in these terms, but we need to find a way to work with them. Such an approach should be based on historical responsibility and capacity to act. He explained further the concept of Equitable Access to Sustainable Development (EASD), which was introduced in the Cancun Agreement. Some of the key elements of the EASD are that each country must have a sufficient share of the limited remaining greenhouse gas budget and, adequate financial and technological means to keep within the available greenhouse gas budget without compromising poverty eradication and legitimate development needs. But, to make these things happen is extremely difficult in the midst of a development and economic crisis. Mr. Athanasiou shared work he has been doing on a reference framework or way of thinking called Global Development Rights (GDR) to determine fair shares for each country where the key concepts are historical responsibility and capacity. By quantifying capacity and historical responsibility through the index, the GDR defines national obligation of emission reduction.

Prof. Suzuki presented on co-benefits and short-lived climate forcers (SLCFs). For short-term achievement, he explained that it might be difficult to limit global mean temperature rise to within 2C from pre-industrial level only with CO₂ mitigation actions. Therefore, in addition to CO₂ reduction it is necessary to address SLCFs such as tropospheric ozone and black carbon. However he felt that traditional black carbon mitigation measures are not sufficient, rather he proposed “co-control” of air pollutants based on the relative radiative forcing of a pollutant. The Climate and Clean Air Coalition to Reduce Short Lived Climate Pollutants (CCAC) was launched in February 2012 to take advantage of benefits of mitigating SLCF for stabilising global climate change. Because Asian countries are among the major GHG and air pollutants emitters, SLCF mitigation actions could bring near-term climate and development benefits, especially to developing countries in the region. As with other speakers he expressed concern about how we should interpret the phrase “in accordance with their common but differentiated responsibilities and respective capacities” as it is an ever present unresolved issue.



Plenary Session 4

RIO+20 FOLLOW UP

Session Outline & Objectives

The United Nations Conference on Sustainable Development 2012, dubbed Rio+20, held in June 2012 marked the twentieth anniversary of the United Nations Conference on Environment and Development (UNCED). Rio+20 played host to discussion on sustainable development in the context of the 21st century global paradigm, and served as a platform for reaffirming global commitments made in the previous 20 years. Outcomes on green economy, institutional framework for sustainable development, a framework for action and follow-up, and the means of implementation have numerous implications for sustainable development governance at all levels. In this session views were exchanged on how sustainable development governance could be strengthened at the global level, and discussed what kind of implications such a global movement will bring to Asia and the Pacific, particularly in terms of strengthening regional environmental governance, taking into account economic and social conditions.

List of Speakers

[Moderator]

Prof. Ryokichi Hirono, Professor Emeritus, Seikei University

[Keynote Speakers]

Mr. Rae Kwon Chung, Director, Environment and Development Division,
United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)

Prof. Nay Htun, Professor, State University of New York, Stony Brook

[Discussant]

Mr. Surendra Shrestha, Director & Focal Point for Sustainable Development Goals (SDGs) at Rio+20 Secretariat



Key Messages

- Looking at the process for producing the outcome document from Rio+20 there are many problems with the system, as seen by the many brackets and deleted text but also for the title – it does not consider the difference between wants and needs.
- Revisions need to be made to the UN system, from the negotiation process to the mandates of UN agencies which are both growing outdated in the 21st century.
- Many of the problems during the Rio+20 process were due to simple misconceptions about key concepts – in particular green economy, which should be seen as a way to operationalise sustainable development.
- Discourse based on a paradigm of developed and developing countries is outdated; we should be talking about rich and poor populations as they exist within and between nations.
- A shift is taking place where the international is guided by the regional. We should start with building better local communities, and working up from there.

Summary

Prof. Htun based his presentation on a comparison of the UNCED in 1992 and UNCSD in 2012, by looking at major achievements and outcomes of each conference over the subsequent 20 years. First, although the concept of sustainable development had been around in various forms it was in 1992 that it received widespread legitimacy. This was due in part to the attendance of many heads of state but also from the inclusion of non-governmental participants as 1992 was a floodgate for civil society to participate in international conferences. Now he felt the concept of Major Groups is outdated but much has been achieved since their inclusion. In 2012 the concept of a green economy – which has been around since before 1992, was generally accepted but with many reservations. It is important to explicitly link green economy, poverty alleviation, and sustainable development, something which was a weak point previously, but a strong point of 2012. Regarding the outcome document the number of brackets in the document before the Brazilians took over shows that there are major issues with the current system which need to be resolved. In this regard he mentioned the proposed Sustainable Development Goals process which he said is open and



transparent, but the processes and procedures will be the same as the UN has used for 60 years. Many have queried that such an old process, which was found by many to not work at Rio+20, fails to represent the world today, stating that “we will not repeat the painful process we had for the last two years.” He suggested UN agencies look at their mandates; UNEP for example has had the same mandate since 1972, but his exhortation applied to all the UN agencies and their mandates. The Rio+20 outcome document was titled “the future we want” – but he questioned is it really the future we want? He felt we need to clarify the difference between wants and needs.

Mr. Chung focused his presentation on the green economy, aiming to clarify its role under sustainable development and at Rio+20, and then what it means for the Asia-Pacific region. At the Rio+20 conference one of the substantive outcomes he mentioned was that the green economy was recognised as one of the important tools for achieving sustainable development. However he noted that there are multilayered misperceptions of green economy which led to many of the problems with the Rio+20 meeting and why were they so difficult to resolve. Some countries felt green economy is a way to commercialise nature, but he clarified that it should be interpreted as “greening the economy to protect nature”. Another misperception he shared was that green economy is meant to replace sustainable development. He clarified that green economy is a way to operationalise sustainable development. He felt poverty was not emphasised enough in the early green economy discussions. While some felt that green economy and poverty lead to tradeoffs he felt that there should be win-win strategies by balancing mid-long term economy planning and short-term actions. In essence, there can be synergy between short-term alleviation and long-term eradication. And while green economy is supposed to be for everyone he suggested that it is beyond the reach of many poor countries because of money and technology, but he said that these two factors are not the only factors to focus on. More important is the need for an enabling policy framework and strong leadership. Despite the historical responsibility of developed countries, developing countries still need to change the way they grow. The poor are the most vulnerable and will suffer anyway, but they should not contribute to their own suffering by doing actions which exacerbate environmental hazards. At the moment investing in renewable energy often leads to losses because fossil fuels are so cheap; however profits need to be generated to really be called a green economy. It is for this reason that the government needs to jumpstart the process as it will never happen by the market only.

Mr. Shrestha gave brief comments on the outcomes of the Rio+20 conference, stating that Brazil's resolution to have wide public participation which utilises new social media technology may be adapted in the UN system. Throughout his speech he emphasised the topics of community and participation. He noted the strong political commitment for sustainable development shown at Rio+20 and indicated that all UN agencies will focus on it from now on. He noted the importance of sustainable consumption and production and the role of measures beyond GDP which should be emphasised throughout the UN. Now the need is to build on the MDGs and look at the SDGs for a post-2015 framework to make one set of goals for the national community. However, sustainable development must be the overarching goal and SDGs are a means to prioritise action. Government alone cannot do all implementation, so partnerships should be emphasised especially between civil society and the private sector. Reflecting on the Rio+20 process he noted that the global power structure is evolving but it is still going through some growing pains, he likened it to the awkward years between childhood and adulthood. He felt we are in a transition phase from a bi-polar world to a multi-polar world but this transition is causing problems and difficulties in the UN system. This situation presents an opportunity for innovation at the regional and sub-regional level. For regional and sub-regional stakeholders he suggested that while the existing paradigm is to look to the international level for guidance, they should take what is acceptable at the regional level and show it to the global. This is the "how" of sustainable development, to act without relying on the international level for leadership, and instead build that leadership regionally.



Parallel/ Lunch Sessions

EAST ASIA KNOWLEDGE PLATFORM FOR LOW CARBON GROWTH - KNOWLEDGE IN ACTION FOR POLICY AND INVESTMENT

Session Outline & Objectives

This session was organised based on the assumption that it is imperative that we orchestrate and coordinate knowledge and expertise from around the region and supported by the necessary funds in order to steer towards low-carbon and green growth societies. Participants in this session engaged in frank discussion on how to forge consensus in moving towards low-carbon societies, exchange necessary knowledge, build a substantial linkage between that knowledge and policies, and facilitate wise and effective investments towards low-carbon sustainable societies in a way that fosters active participation from like-minded stakeholders. Key points for discussion in the meeting were how to promote 1) science-science policy linkage, 2) resources mobilisation, 3) transition and “make it happen” and 4) south-south and triangular collaboration.

List of Speakers

[Moderator]

Mr. Hideyuki Mori, President, IGES

[Keynote Speakers]

Mr. Masaya Fujiwara, Principal Fellow, Programme Management Office, IGES

Mr. Junya Nakano, Senior Negotiator, Climate Change Division, International Cooperation Bureau, Ministry of Foreign Affairs

[Speakers]

Dr. Shuzo Nishioka, Secretary General, International Research Network for Low Carbon Societies (LCS-RNet) / Senior Research Advisor, IGES

Dr. Junichi Fujino, Senior Researcher, Center for Social and Environmental Systems Research, National Institute for Environmental Studies (NIES)

Mr. Kyosuke Inada, Deputy Head and Advisor, Office for Climate Change, Global Environment Department, Japan International Cooperation Agency (JICA)

[Discussants]

Dr. Rajendra K. Pachauri, Director-General, The Energy and Resources Institute (TERI) / Chair, The Intergovernmental Panel on Climate Change (IPCC)

Dr. Bindu N. Lohani, Vice President, Knowledge Management and Sustainable Development, Asian Development Bank (ADB)

Mr. Ash Sharma, Vice President, Carbon Finance and Funds, Nordic Environment Finance Corporation (NEFCO)

Prof. Rizaldi Boer, Executive Director, Centre for Climate Risk and Opportunity Management in Southeast Asia and Pacific, Bogor Agriculture University, Indonesia

Prof. Jiang Kejun, Research Professor, Energy Research Institute, National Development and Reform Commission, PRC

Prof. Ram Manohar Shrestha, Emeritus Professor, Asian Institute of Technology

Key Messages

- The East Asia Knowledge Platform for Low Carbon Growth was initiated as an open, multi-layered, flexible network for sharing knowledge on low-carbon growth in Asia. The platform is expected to be utilised to promote the development of low carbon development strategies of a country, and to identify the progresses and facilitate foreign policy.
- In order to facilitate the realisation of a low-carbon and sustainable society, what is needed is formulating and enabling implementation of science-based policies for low-carbon development. The Low Carbon Asia Research Network (LoCARNet) was launched as a knowledge sharing network of researchers who are deeply involved in domestic policy-making processes. LoCARNet is also expected to function as a think tank for the East Asia Knowledge Platform for Low-Carbon Growth, and to become an autonomous network for researchers based on south-south cooperation in the region in the near future.
- To shift the Asian development path in the short-term, integration of regional knowledge on low-carbon development and green growth is needed. The following research area/ topics should be strengthened through LoCARNet: inventory data of region specific items; energy supply and demand; economic evaluation and methodology applicable for evaluating low-carbon growth; low carbon city; mobilising local societies and people; localisation of activities; and education.
- Technical cooperation and high priority planning is needed for scaling up investment. Long-term investment and long-term payback periods with long-term vision and plans can generate benefits and produce national goods and assets in the long-term.

Summary

In this session, the following needs for low-carbon societies were discussed – knowledge sharing among researchers, policymakers, international organisations and experts; and collaboration with practitioners and private sectors for finance and investment. With these two factors, technology availability in a society can be identified, and potential and innovative financial mechanism can be developed. In order to shift the current Asian development path in the short-term and to move towards green growth, integration of Asian wisdom is needed by knowledge groups of industries, policymakers, financial industries and researchers. For promoting knowledge sharing, the initiation of a researchers' network called the Low Carbon Asia Research Network (LoCARNet) was launched with an announcement by the Japanese government at the East Asia Low Carbon Growth Partnership Dialogue held in Tokyo on 15 April 2012. The targets and objectives of LoCARNet are characterised by the following four points: network of leading researchers/ research organisations who are deeply involved in low-carbon growth policy processes in this region; science-science-policy dialogue which can gather knowledge of academics by identifying what policies are needed and how to lead policy implementation; ownership of knowledge by countries, which can be built through data collection and capacity building of local researchers and policymakers; and South-South-North collaboration which can be achieved by increasing research capacity through knowledge sharing and information exchange. Asian has sufficient potential to move forward with low-carbon development, and there are a number of ongoing favourable conditions supporting this potential. On the other hand, the challenge for low carbon knowledge network is how to link and materialise the knowledge to investment. The challenges are to find solutions to “leapfrog” to low carbon development under appropriate pathways and to incorporate knowledge into policy and investment decisions. Thus, the following six concrete steps should be developed; 1) creating knowledge hubs, 2) localising knowledge, 3) formulating knowledge-based policy, 4) linking policy with investment, 5) investing in tangible infrastructure & assets, and 6) engaging the private sector. Through these discussions, researchers and practitioners in the parallel session expressed their common understanding and interests to the needs of low carbon Asia research network.

URBAN CHALLENGES FOR A GREEN AND SMART ECONOMY

Session Outline & Objectives

Measures for a establishing a green economy are being taken around the globe, especially in Asian countries. In this session, the business model for “smart cities” was outlined, followed by actual measures taken by Iskandar Malaysia, City of Yokohama, and City of Kawasaki. The aim of the session was to highlight and discuss issues that need to be handled along with directions of future policies in order to achieve a green economy. In addition, this session aimed to generate a common understanding for stimulating new measures towards a green economy through discussion among participants.

List of Speakers

[Moderator]

Prof. Hidefumi Imura, Senior Policy Advisor & Senior Fellow, Programme Management Office, IGES

[Keynote Speaker]

Mr. Yosuke Mochizuki, Director, Nikkei BP Cleantech Institute

[Speakers]

Prof. Dr. Ho Chin Siong, Deputy Director, Office International Affairs, Universiti Teknologi Malaysia

Mr. Masato Nobutoki, Executive Director for the FutureCity Promotion, City of Yokohama

Ms. Yoko Maki, Executive Director, Global Environment Knowledge Centre, Environment Bureau, Kawasaki City

[Panellists]

Prof. Wanxin Li, Assistant Professor, City University of Hong Kong, China

Dr. Akira Ogihara, Senior Coordinator, Governance and Capacity Group, IGES

Dr. Abdessalem Rabhi, Policy Researcher, Kansai Research Centre, IGES

Mr. Lewis Akenji, IGES Fellow

Key Messages

- The keys for creating successful smart cities are citizens as the main actors and cooperation among multiple stakeholders.
- Integrated elements (and various themes), such as welfare, population issues, including aging societies, policies and frameworks, etc., should be considered when creating smart cities.
- Both technologies and services provisions will form the infrastructure of a smart city.
- Through dissemination of information, technologies and knowledge, which are related to smart city creation, changing actions and behaviours of citizens into eco-friendly way will be possible.
- When technologies are transferred from developed countries to developing countries, use applications and applicability of customisations should be considered. The common qualities of both developed and developing countries should be considered.

Summary

Mr. Mochizuki made a keynote speech entitled, “Smart City: From Pilot Stage to Reality” based on the understanding that as urbanisation is gradually growing social issues will emerge and energy consumption will increase. Renewing the social infrastructure from the 1960’s is a necessity. Since 2006, smart city projects have emerged in the world and the top projects for investing in technologies are related to smart grid and smart mobility. By 2030, it is expected that the smart city market size will be expand to 4 quadrillion yen. However, the stance of “technical sale” by companies is not the key for creating smart city. Two elements are the key for creating and developing smart city - city creation by citizens through service disseminations (citizens are the main actor for creating smart city); and information sharing between industries. In the comment session, Dr. Siong introduced “Urban Challenges for a Green and Smart Economy – The Case of Iskandar Malaysia.” Mr. Nobutoki explained “Future Challenge in Yokohama toward FutureCity,” while Ms. Maki discussed “Green Innovation in Kawasaki.” In the discussion session, Prof. Li pointed out that the smart city concept is very complicated, thus we have to think of the framework towards our ideal city creation. Dr. Rabhi mentioned governments should make rules and regulations to make business and investment work smoothly. Mr. Akenji noted three elements for creating a sustainable smart city – behaviour of each stakeholder, including citizens; behaviour of facilitator; and changing actions for creating smart city. Dr. Ogihara gave comments that business package type does not develop well due to lack of project management and shortage of information. Prof. Imura concluded that the green economy is implemented by actively being supported by citizens.

SUSTAINABLE DEVELOPMENT GOALS - THE ROAD AHEAD

Session Outline & Objectives

A broad framing of the future process for SDGs was agreed in Rio. The coming years will be defining if the goals can help reorient global economic and development activities onto the right path towards sustainability. Implementation toward these goals necessitates better monitoring and governance mechanisms. At this critical juncture, 20 years after the Rio Earth Summit, participants in this session discussed how important it is to look at similar efforts in the past and draw lessons and identify barriers to their effective implementation. Also discussed was ways to effectively operationalise the goals, targets and indicators at national and local levels, to achieve sustainable development.

List of Speakers

[Moderator]

Prof. Norichika Kanie, Associate Professor, Department of Value and Decision Science, Graduate School of Decision Science and Technology, Tokyo Institute of Technology

[Speakers]

Mr. Surendra Shrestha, Director & Focal Point for Sustainable Development Goals (SDGs) at Rio+20 Secretariat

Ms. Masnellyarti Hilman, Deputy Minister for Hazardous Substances, Hazardous Waste and Solid Waste Management, Ministry of Environment, Republic of Indonesia

Dr. Atsushi Suginaka, Director, Global Environment Division, International Cooperation Bureau, Ministry of Foreign Affairs of Japan

Dr. Mark Elder, Director, Governance and Capacity Group, IGES

Mr. Tetsuro Yoshida, Researcher, Governance and Capacity Group, IGES

Key Messages

- It will be important to merge the MDG and SDG processes so that political acceptability of the SDG process can be ensured;
- There is a need for intermediate goals to fit national level politics (3-5 years) along with greater and more long-term goals and targets;
- One of the main challenges will be to link the globally defined SDGs to meaningful ones at national levels;
- Implementing goals and targets at national and local levels can benefit from incorporating a incentives (rewards) system that can encourage compliance from local governments;
- Human Security should be a guiding principle, as should the importance of participation of relevant stakeholders, as well as private sector;

Summary

Prof. Kanie stated that the SDGs could focus on basic human needs for developing countries, and that the challenge behind operationalising the goals would be how to define and establish realistic trade-offs between interventions directed at economic, environmental and social priority areas, respectively. Mr. Shrestha emphasised that the SDGs should be seen as a way to prioritise the international community's actions to attain sustainable development. He ended his presentation by sharing information on the main characteristics of the SDGs, including that it could be guided by 1) Human wellbeing within the limits of planetary wellbeing; 2) New matrix for measurement; 3) a change in timeframe; as well as 4) the need for intermediate goals to fit national level politics (3-5 years) along with greater goals and targets for longer term policy guidance. Mr. Yoshida shared possible principles for the SDGs and stated that the concept of planetary boundaries could be a good framework for developing the SDGs. He emphasised the importance of CBDR as a central principle in SDG implementation and asked whether the SDG process was merely reinventing the wheel, given past attempts at sustainable development indicators. Ms. Hilman presented examples of implementation of measures for Green Cities based on Indonesian cases. She explained that implementation programmes benefit from incorporating both carrots and sticks as incentives. Her programme mainly used positive incentive mechanisms, while penalising had been limited to 'naming and shaming'. Dr. Suginaka explained that The Future We Want said little concrete about the SDGs, but that it initiated a process, however it is not yet clear whether the SDG process and the other UN Post 2015 Development Agenda (MDG review process) would recommend a merger between the MDGs and the SDGs. He stated that Japan plays a leading role in the post-2015 development agenda and therefore is closely following the SDG defining process as well. Dr. Elder focused on the governance aspect of development goals and highlighted a number of strengths and weaknesses of the different levels of governance. He stated that while local levels of governance would be the most instrumental to implementation they were often constrained by lack of legislative power and financial capital. Finally, he stated that the core functions of a reformed IFSD should be to monitor SDG implementation by institutionalising peer reviews.



Lunch Session

UNEP GEO5 / GLOBAL OUTLOOK ON SCP POLICIES PRESENTATION

Overview

In this session the audience had the opportunity to hear about two of UNEP's major publications which IGES has contributed to – the flagship Global Environmental Outlook (GEO), and the Global Outlook on Sustainable Consumption and Production (GO SCP). The GEO report series has been produced since 1997 as a key response to UNEP's overall mandate from the UN General Assembly which includes keeping the environment under review. The fifth publication in this series, GEO5, was produced over the course of three years and involved contributions from hundreds of experts from around the world. GO SCP is a collection of case studies of best practices, policies, and initiatives with examples from five regions and the global level. IGES researchers were closely involved in the publication of the regional chapters and together with UNEP presented the major findings followed by commentary from representatives from regional and international organisations.

List of Speakers

[Moderator]

Dr. Peter King, Senior Policy Advisor, IGES Regional Centre, Bangkok

[Speakers]

Ms. Anna Stabrawa, Regional Coordinator for Early Warning & Assessment, United Nations Environment Programme (UNEP)

Mr. Lewis Akenji, IGES Fellow

[Discussants]

Dr. Young-Woo Park, Regional Director & Representative for Asia and the Pacific, United Nations Environment Programme, Regional Office for Asia & the Pacific (UNEP-ROAP)

Dr. Bindu N. Lohani, Vice President, Knowledge Management and Sustainable Development, Asian Development Bank (ADB)

Summary

Ms. Stabrawa presented the background and purpose of the GEO series, explaining that it is a changing and evolving process that aims to become more and more policy relevant. In particular this is done by bridging the "science-policy interface". GEO5 makes use of the concept of planetary boundaries, of which increasing human pressures is causing thresholds to be exceeded, namely in the boundaries for the nitrogen cycle, biodiversity loss, and climate change. Regarding internationally agreed goals she explained that growth itself or ratification of environmental treaties is not a success, rather the implementation of them is. However this is severely lacking. Overall GEO5 focused on solutions by looking at what is working in each region and looking to scale up successes. Mr. Akenji presented on the GO SCP report, and explained that SCP is at the centre of many of the problems facing the world now. He felt that SCP shows us how to walk the talk of sustainable development, however among Asian countries awareness of SCP often limited to simple things like reducing use of plastic bags and turning the lights off. SCP is much more than that and so proponents need to do a better job of spreading the messages. The GO SCP report is one approach to establishing a knowledge base for spreading the benefits of SCP and support greater participation. He noted that much of the SCP base in Asia comes from cleaner production which was very technology oriented. Now it is known that SCP also needs the human aspect to be successful.



EFFECTIVE DECONTAMINATION IN FUKUSHIMA AND EXPERIENCES IN EUROPE

Session Outline & Objectives

After the Chernobyl nuclear accident in 1986, actions were taken by various countries in Europe to implement decontamination, and following this, a total of 50 research and disaster-related organisations from 23 countries under the European Commission took parts in the development of an on-line system and set of guidelines for emergency decision support. Inviting experts from Europe based on their experience and knowledge developed in Europe as well as field survey in Fukushima, this session promotes public discussion on how to best proceed effectively with full-scale decontamination on a national and local level from this fiscal year.

List of Speakers

[Moderator]

Mr. Hideyuki Mori, President, IGES

[Keynote Speakers]

Dr. Hiroshi Suzuki, Professor Emeritus, Fukushima University /
Chair, Fukushima Prefecture Reconstruction Committee

Mr. Kuniaki Makiya, Deputy Director General for Decontamination, Ministry of the Environment, Japan

Mr. Masamitsu Kogota, Senior Policy Administrator of Environmental Recovery Sector,
Social Affairs & Environment Department, Fukushima Prefectural Government

[Panellists]

Dr. Viktor Averin, Director, Research Institute of Radiology, Belarus

Mr. Gilles Hériard-Dubreuil, President, MUTADIS, France

Prof. Wolfgang Raskob, Professor, Karlsruhe Institute of Technology (KIT), Germany

Prof. Eduardo Gallego, Director, Nuclear Engineering Department, Technical University of Madrid, Spain

Prof. Dr. Miranda A. Schreurs, Director of the Environmental Policy Research Institute,
The Freie Universität Berlin

Prof. Sachihiko Harashina, Professor, Faculty of Policy Informatics, Chiba University of Commerce /
Professor Emeritus, Tokyo Institute of Technology

Key Messages

- Decontamination should be done within the wider context of the rehabilitation/reconstruction strategy for the region, and should not be implemented as a separate project.
- One-way communication from the experts to people or the government to people typically does not lead to effective processes or outcomes; local stakeholders should be involved in the recovery process including receiving capacity development to help with understanding and to meaningfully participate.
- Wider involvement and engagement of stakeholders in understanding risks and discussing future visions (of health, of local economy, and of national energy mix) should be a fundamental concept of the recovery/rehabilitation strategy.
- Social scientists as well as medical/chemical scientist are encouraged to support such activities.

Summary

Three keynote speeches were made, first by Dr. Suzuki who described the objectives of FAIRDO project. He also explained that FAIRDO team has just came back from one week mission in Fukushima together with European experts; Mr. Makiya briefly described Government of Japan's activities on decontamination, focusing on area classifications and roadmaps; Mr. Kogota from Fukushima Pref. Government described its activities on decontamination. 35 of 41 municipalities have already formulated the decontamination plans, and 30 have launched activities. However the progress is diverse. Fukushima prefecture also addresses strengthening of technical support to operators/managers and communication (providing information) to citizens. Five experts from Europe and one from Japan briefly described their experiences of decontamination and radiation control in Europe, and conveyed their observation in Fukushima. Dr. Averin from Belarus stressed that decontamination should be placed in the wider context of rehabilitation/reconstruction of the region, and should not be implemented as a separate project; Mr. Dubreuil pointed out that conventional manners of top-down policies such as area classification and regulation of food and crops increases distrust. He argued that engagement of people and communities in understanding risks and taking countermeasures is necessary for sustainable recovery; Prof. Raskob introduced EURANOS's activities. Based on its simulation models EURANOS provides information to support decision on decontamination and protection in the forms such as guidelines and handbooks. The simulation encompasses socio-economic factors as well as natural and technical ones. Prof. Gallego introduced NERIS platform's activities to support communities and local governments to understand the conditions after Chernobyl accident and formulate the long term rehabilitation plans. He argued that local people as well as government officers and researchers have their own specialties that will contribute to mitigating risks and enabling rehabilitation. Prof. Dr. Schreurs addressed what she observed in Fukushima: firstly, the conceptualisation of decontamination is not sufficiently connected to a wider vision of rehabilitation; current manners of "dialogue" do not sufficiently deal with long term visions of people's lives and local societies. Prof. Harashina also argued that one-way communication from the experts to people or the government to people may not be effective. Proactive engagement of people in understanding risks (such as ambient dose & food contamination), discussing possible countermeasures (decontamination, food control, relocation and so on) is necessary.

THE SATOYAMA INITIATIVE AND RESILIENCE - PATHWAYS TO A SUSTAINABLE SOCIETY -

Session Outline & Objectives

To cope with the rising pressures of environmental change, global biodiversity loss, and extreme natural hazards such as the Great East Japan Earthquake and Tsunami, societies need to build and enhance the resilience in the face of future disturbances. The Satoyama Initiative aims to conserve sustainable human-influenced natural environments (Socio-Ecological Production Landscapes and seascapes; SEPLS) through broader global recognition of their value. Its focus on the scientific aspects of human-nature interactions in SEPLS provides insight into the importance of promoting resilience. This session will illustrate the diverse benefits obtained through SEPLS and explore possible means to integrate this notion within environmental policy decisions.

List of Speakers

[Moderator]

Prof. Alfred Oteng-Yeboah, National Chairman, Ghana National Biodiversity Committee

[Panellists]

Dr. Krishna Chandra Paudel, Secretary, Eastern Regional Administration Office, Ministry of Home Affairs, Government of Nepal

Ms. Joji Cariño, Policy Advisor and Team Leader, Indigenous Peoples Capacity-Building Project for CBD Implementation, Indigenous Peoples' International Centre for Policy Research and Education (TEBTEBBA)

Mr. Katsuhiko Tada, President, Tada Organic Farm Co., Japan

[Discussants]

Dr. Ryo Kohsaka, Visiting Research Fellow, United Nations University Institute of Advanced Studies (UNU-IAS) (Operating Unit Ishikawa Kanazawa: OUIK) / Associate Professor, Faculty of Human Sciences, Institute of Human and Social Sciences, Kanazawa University

Dr. Kalemani Jo Mulongoy, Visiting Professor, United Nations University Institute of Advanced Studies (UNU-IAS)

Key Messages

- In the face of natural disasters, it is crucial to have resilience – not only in an ecological or technical sense, but resilience of communities and peoples' spirits.
- The *Satoyama* Initiative and its international partnership are useful and workable; when applied properly, they can contribute to policy improvements for the conservation of biodiversity.
- People have moved to the centre of discussions of resilience and conservation.
- Community involvement and an appropriate policy framework are crucial to sustainable management of resources and landscapes.
- The integration of SEPLS into NBSAPs and LBSAPs is very important and there needs to be active exchange of information domestically and globally on these activities.

Summary

Prof. Oteng-Yeboah provided participants with a brief introduction to the *Satoyama* Initiative and the term socio-ecological production landscapes and seascapes (SEPLS). He pointed out that the second of the Convention on Biological Diversity's three objectives has been problematic, particularly the issue of sustainable use, but that "Japan has provided an answer: satoyama and satoumi". Dr. Paudel drew on his extensive experience with community forestry in Nepal. After giving an overview of forestry-related legislation over the past 55 years, he explained how the government has increasingly recognised the importance and value of community forestry and how community forestry user groups (CFUGs) have formed. Finally, he talked about the integration of SEPLS into National Biodiversity Strategies and Action Plans (NBSAPs), including the potential and importance of harmonisation with existing institutions and effective engagement with CFUGs. The second panelist, Ms. Cariño, provided an in-depth presentation of indigenous territorial and landscape management. She emphasised that traditional territories of indigenous peoples are some of the world's oldest SEPLS – mosaic landscapes sustainably managed over long periods using traditional knowledge. Among other things, she indicated the importance of having secure rights so that systems under pressure will not continue to erode. She concluded her presentation by highlighting Strategic Goal E of the Aichi Targets as well as key passages from the Rio+20 outcome document "The Future We Want". Mr. Tada shared his own personal insights from experiencing the Great East Japan Earthquake and Tsunami on 11 March 2011. As the owner of a farm in the affected Tohoku region, he immediately organised recovery efforts drawing on the community's strong resilience. He also emphasised how there is a need for realism as recovery efforts move forward, and ideas need to be collected abroad as well as within Japan to foster out-of-the-box thinking.



ENERGY EFFICIENT HOUSING IN ASIA -BARRIERS AND POLICY DRIVERS

Session Outline & Objectives

The combination of rapidly changing urban housing patterns and concerns over energy security makes energy-efficient housing (EEH) a critical issue for developing Asia. Effectively tackling this issue requires an analysis of the barriers that stakeholders face in uptake, and of how government policies can facilitate a transition to more sustainable housing. This session addressed the above questions, drawing from initial findings from an ongoing research project currently being implemented in China, India, Thailand and the Philippines. Each country study has reviewed the policy environment and analysed stakeholder barriers and opportunities. The session shared preliminary findings and discussed how to overcome barriers for energy efficient housing.

List of Speakers

[Moderator]

Dr. Magnus Bengtsson, Director, Sustainable Consumption and Production Group, IGES

[Speakers]

Mr. Lewis Akenji, IGES Fellow

Dr. Patrick Schroeder, International Advisor, China Association for NGO Cooperation (CANGO), China

Mr. Sangeeth Varghese, Chairman and Managing Director, LeadCAP Knowledge Solutions Private Limited, India

Mr. Fei Guo, Researcher, Sustainable Consumption and Production Group, IGES

[Discussants]

Prof. Hidefumi Imura, Senior Policy Advisor & Senior Fellow, Programme Management Office, IGES

Ms. Ikuyo Kikusawa, Policy Researcher, Kitakyushu Urban Centre, IGES

Key Messages

- Governments are the key actors for providing drivers and enablers towards energy efficient housing. An effective policy mix needs to include both regulatory tools that ensure a minimum level of performance, such as building codes and performance standards for household appliances, and economic incentives that stimulate innovation and higher levels of performance, such as tax breaks and subsidies.
- In most countries energy prices are kept artificially low through subsidies and regulations which leads to weak incentives for efficiency improvements and energy saving. In certain cases, such as for district heating in northern China, users are not billed based on the actual amount of energy used.
- Although residential buildings are major energy users in developing countries in Asia, many countries still lack residential building codes with energy efficiency requirements. Where such codes exist, they are only updated sporadically and the enforcement is typically weak.
- Voluntary energy efficiency labelling systems for residential buildings exist in some countries, but the number of new constructions with such labels is still very small. The prices of labelled houses are significantly higher than for conventional building designs so labelled houses are mainly aimed at a small niche segment of wealthy households.

Summary

Mr. Akenji introduced the objectives and framework of the research project on overcoming barriers to energy efficient housing in developing Asia. He emphasised the significance of the housing sector for energy efficiency improvements and stressed the need for a stakeholder approach. Dr. Schroeder presented initial findings of the China country study. He pointed out that in China there is a huge potential to improve energy efficiency and stressed that the government has a crucial role for promoting energy efficient practices. Currently, low prices of energy, inappropriate energy billing systems, and deficiencies in the enforcement of regulations are creating weak incentives for improvement. Mr. Varghese presented initial findings of the India country study. He mentioned that awareness on energy efficiency among general households is still fairly low. Also the India study found that governments play a key role but that existing policies are too weak and not effectively implemented. Subsidies to energy, and resulting low prices was found to be a major barrier. Mr. Guo presented findings of a study on policies and practices in Thailand and the Philippines. These two countries were found to share many barriers, including slow and infrequent revisions of building energy codes, lax enforcement of regulations, and weak economic incentives. Prof. Imura shared some outcomes of a session on smart cities where the significance of lifestyles had been emphasised. He also asked the question of the relative influence of households and producers, and the role of governments. Ms. Kikusawa introduced some findings from her field research on smart communities in Japan. She stressed the need to involve stakeholders in designing regulations and voluntary schemes. She also underscored the vital role that government subsidies can play in facilitating adoption of new technologies.



RESILIENT ENERGY SYSTEM TOWARDS GREEN ECONOMY

Session Outline & Objectives

The Great East Japan Earthquake and the Fukushima nuclear accident showed that resilient energy systems are important for Japan's transition to a green economy. To realise green economy through an establishment of resilient energy system this session considered two key questions - what obstacles does Japan have? And, what should Japan do? Based on regional experiences in Toyama (Central Japan) as well as an IGES study which employs a detailed bottom-up energy model, this parallel session addressed these fundamental questions and discussed key challenges as well as necessary actions to promote resilient energy systems and green economy from various perspectives such as history, national/regional economy, energy technology and climate change.

List of Speakers

[Moderator]

Dr. Satoshi Kojima, Director, Economy and Environment Group, IGES

[Keynote Speakers]

Prof. Hiroyuki Uesaka, Professor, Faculty of Child Development and Education, Toyama University of International Studies

Dr. Takeshi Kuramochi, Associate Researcher, Climate Change Group, IGES

[Panellist]

Prof. Hiroki Hondo, Professor, Graduate School of Environment and Information Sciences, Yokohama National University

Key Messages

- Most consumers do not know how electricity is produced and transmitted to each household. Changing consumer behaviour by visualising supply side of energy is very important for resilient energy system.
- It is better to have a dual path system where industry and households primarily satisfy their energy demand by commercial energy and self-supplied energy, respectively.
- Japan can pursue long-term reduction of CO₂ emissions (80% by 2050 compared to 1990 levels) while reducing dependence on nuclear energy through large-scale deployment of low-carbon energy technologies such as renewable energy and carbon capture and storage (CCS). At the same time, energy demand reduction through lifestyle and economic structure changes will become increasingly important.

Summary

Based on historical experience in Toyama Prefecture, Prof. Uesaka explained that people became users of electricity and subsequently dependent on uncontrollable energy systems. Industry uses large amount of energy while households consume relatively smaller amounts. With batteries, households can satisfy their energy demand by producing their own energy. He recommended that industry use commercial energy and household rely on self-producing energy, that is, the dual path system. Dr. Kuramochi explained the results his team's energy model analysis and showed that Japan can satisfy energy demand and reduce CO₂ emissions by 80% in 2050 compared to 1990 levels while gradually phasing out nuclear power supply, provided that substantial use of renewable energy and carbon capture and storage technology (CCS) is realised. For this purpose, deregulation and promoting renewable energy, investment for commercialisation of CCS, procurement of natural gas, and energy demand reduction through changes in life style and industrial structure are necessary. With regard to the risk of blackouts during summer due to the lack of nuclear power generation, he pointed out that there is an urgent need for the improvement of the interconnectivity of the nationwide electricity grid. Prof. Hondo emphasised that any future resilient energy systems should be a system which generates positive social and economic effects (e.g., industrial development and regional development) and connects energy suppliers and consumers. In addition, he showed a concern that energy consumers do not recognise that they also participate in national/regional energy system. Prof. Hondo stressed that continuous involvement of consumers in energy system is necessary for achieving genuine green economy.



DOMESTIC CLIMATE ACTIONS AFTER DURBAN

Session Outline & Objectives

This session gives an update on domestic climate actions in major economies and discusses how each country can contribute to collective action toward achieving the 2 degrees Celsius target. Experts on China, India, Indonesia, Japan and Germany were invited to provide their insights. Panelists interacted with each other as well as with the audience. Topics included whether the Fukushima nuclear power plant accident influenced the energy and climate policies in the panelists' respective countries and climate change equity.

List of Speakers

[Moderator]

Prof. Hironori Hamanaka, Chair of the Board of Directors, IGES

[Panellists]

Prof. Dr. Miranda A. Schreurs, Director of the Environmental Policy Research Institute, The Freie Universität Berlin

Prof. Yukari Takamura, Professor, Graduate School of Environmental Studies, Nagoya University

Prof. Priyadarshi Shukla, Professor, Public System Group, Indian Institute of Management, Ahmedabad, India

Prof. Rizaldi Boer, Executive Director, Centre for Climate Risk and Opportunity Management in Southeast Asia and Pacific, Bogor Agriculture University, Indonesia

Prof. Jusen Asuka, Director, Climate Change Group, IGES / Professor, Center for Northeast Asian Studies, Tohoku University

Key Messages

- By further increasing the renewable power installation to replace nuclear power, developed countries like Germany can contribute to lower the renewable electricity costs, thus facilitating large-scale deployment of renewables around the world.
- Low-carbon development is an important agenda for both developed and developing countries. Developing countries are also taking actions to address climate change.
- People need to switch over from “I do, because you do. You don't, so I won't.” – attitude to acting.

Summary

Prof. Dr. Schreurs presented that Germany has set mid-long term targets on renewable energy and energy efficiency by tracking back from the long-term target of 80-90% reduction of GHG emissions by 2050 compared to 1990 levels. Currently there is strong motivation among German citizens to tackle climate change and simultaneously shift away from nuclear power. Prof. Asuka presented that China recently started a voluntary project-based GHG emissions trading scheme. From the 12th Five Year Plan, the achievement of the carbon intensity target is directly linked to the evaluation of personnel in charge. Prof. Asuka explained that China is being criticised by the international community for over-protecting the renewable energy industry, meanwhile UNFCCC urges countries to increase investment for renewables. Fair evaluation of climate change mitigation action is not easy. Prof. Takamura presented the current national debate in Japan over the three options for its new energy and environment strategy. The main focus in the national debate is the degree of dependence on nuclear power and that GHG emissions reduction issue is rather neglected. Prof. Takamura stated that comparability of efforts and innovative ideas are needed. People need to switch over from an “I do, because you do. You don't, so I won't” attitude to real action. Prof. Shukla presented that various measures are implemented in India to avoid carbon lock-in within the national economy. India puts emphasis on the climate-relevant co-benefits from water management and urban planning measures. Prof. Boer presented that LULUCF and peat fire account for more than half of Indonesia's national total GHG emissions. Five main strategies and action plans for LULUCF toward low carbon development have been announced to date.



DEVELOPMENT OF SMART COMMUNITIES IN ASIAN CITIES

Session Outline & Objectives

The session introduced a smart community being developed in Higashida Area in Kitakyushu City, Japan and the city's efforts in extending support to develop similar models in Surabaya, Indonesia and Putrajaya, Malaysia in cooperation with other partners in Japan. This session discussed the constraints and challenges to disseminate similar approaches in terms of legal, institutional and technical aspects with focuses on connection to the national grid and the potential of a city-to-city cooperation modality to promote the concept.

List of Speakers

[Moderators]

Mr. Toshizo Maeda, Acting Director, Kitakyushu Urban Centre, IGES

Ms. Ikuyo Kikusawa, Policy Researcher, Kitakyushu Urban Centre, IGES

[Panellists]

Mr. Mohd. Rosli Abdullah, Senior Under Secretary, Green Technology Sector, Ministry of Energy, Green Technology and Water, Government of Malaysia

Mr. Gingin Ginanjar, Landscaping Section, Landscaping and Common Street Lighting Division, Cleanliness and Landscaping Surabaya City Council, Indonesia

Mr. Yoshinori Furukawa, Director, Smart Community Department, New Energy and Industrial Technology Development Organization (NEDO), Japan

Mr. Toshikazu Matsuoka, Chief Executive (Future City), Environment Bureau, City of Kitakyushu

Mr. Motoshi Muraoka, Partner, Senior Executive Manager, Socio & Eco Strategic Consulting Sector, NTT Data Institute of Management Consulting, Inc.

Key Messages

- Technical assistance and technology transfer for 'smart' communities in the context of low carbon city development are being carried out via city-to-city and at the national level. For such initiatives to be viable and sustainable, the assistance provided must meet the demands of the recipients and be integrated with the recipient's sustainable development goals.
- The key sectors for smart community and low carbon development are the management of energy, transport, buildings, water, waste and urban green spaces. Many leading local governments are already working on these sectors, and the next step would be to quantify their baseline emissions and reductions achieved. Astute local governments may initiate actions rather than waiting for directives to be imposed by the national government.
- City-to-city cooperation could be understood as a mutual learning mechanism, as opposed to a conventional mentor-recipient and assistance-oriented kind of relationship.

Summary

Mr. Matsuoka began with an overview of the geographical and demographical characteristics of Higashida Area, which is the designated 'Smart' Community of Kitakyushu and is a mixed-development area comprising industrial, commercial and residential zones. Serving as the area's backbone is a cogeneration system using natural gas (integrated with hydrogen, solar, wind and storage batteries), which is highly efficient with low energy loss. Nippon Steel Company supplies hydrogen, a byproduct of its industrial processes, at a hydrogen station and to demonstration houses using fuel cells. Energy production and consumption are managed by the area's independent 'smart community center', which implements dynamic pricing. Mr. Matsuoka explained that approaches for technology transfer must be practical, linked to sustainable development and meet the needs of society. For example, the wastewater treatment facilities in Surabaya's industrial complex would serve the neighbouring residential communities while generating energy for industries, whose activities will then enrich the city's economy. Mr. Ginanjar provided an overview of 'Low Carbon Management in Surabaya: Efforts and Actions towards an Eco and Sustainable City'. Surabaya's strategies target four sectors – waste, green space, energy and transport, and are based on cooperation among community groups, government, NGOs and the private sector. Mr. Abdullah introduced the 'Green Township Initiatives in Malaysia'. His Ministry is a new entity tasked with facilitating the growth of green technology to accelerate the national economy and promote sustainable development. Its activities are based on four pillars – energy, environment, economy and society, and four key sectors – energy, buildings, transportation and water & waste. Mr. Furukawa introduced a low carbon city collaboration project between the Governments of Malaysia and Japan implemented in Putrajaya, Malaysia, which has established a road map and is going to set up a task force for further implementation in 2012. Mr. Muraoka discussed the 'Development of Smart Communities in Asian Cities'. Referring to Kitakyushu City's Higashida development, he stressed the importance of focusing on residents' welfare in developing smart communities.



FINANCIAL INNOVATIONS FOR RESILIENCE: FROM THE TSUNAMI IN TOHOKU TO CLIMATE CHANGE IN BANGLADESH AND BEYOND

Session Outline & Objectives

Globally, damages caused by natural disasters have increased rapidly and are projected to continue increasing. Climate change will be one of the drivers responsible for this increase. Amongst the most vulnerable groups to climate change related disasters are the rural poor in developing countries. They have few resources to insulate themselves from climate shocks and many live in ecological sensitive areas prone to climate-related natural hazards. However, as the East Japan Great Tsunami and Earthquake of March 2011 reminded us, even technologically advanced countries are vulnerable to natural disasters, and the concept of resilience is equally as important for them as it is for developing countries. This session discussed the creation and delivery of innovative financial services, such as microfinance and risk insurance, to build resilience, particular in relation to natural disasters. Lessons were drawn from the experiences of Asian developing countries as well as Japan.

List of Speakers

[Moderators]

Dr. Henry Scheyvens, Director, Natural Resources Management Group, IGES

Dr. Shinano Hayashi, Deputy Director, Natural Resources Management Group, IGES

[Speakers]

Dr. Mohammad Mahfuz Kabir, Senior Research Fellow,
Bangladesh Institute of International and Strategic Studies (BISS)

Dr. Somsak Boromthananat, Director, Asian Coastal Resources Institute Foundation (CORIN-Asia)

Mr. Kyosuke Inada, Deputy Head and Advisor, Office for Climate Change,
Global Environment Department, Japan International Cooperation Agency (JICA)

Mr. Hiroaki Saito, CEO, iLink Inc. (Sanriku Oysters Reconstruction Project)

[Panellists]

Prof. Qian Ye, Executive Director, International Project Office,
Integrated Risk Governance Project (IRGP/IHDP), Beijing Normal University

Dr. Md. Mosleh Uddin Sadeque, Interim Executive Director, Institute of Microfinance (InM)

Dr. Md. Abdul Baqui Khalily, Professor, Department of Finance, University of Dhaka

Key Messages

- Microfinance can play a key role in enhancing the resilience of poor households and local communities to natural hazards.
- To be most effective in building household resilience, the 3 main services of microfinance (loans, savings, and insurance) should be delivered simultaneously.
- Microfinance can also aid in reconstruction after natural disasters in developed countries.
- Social businesses, i.e. businesses that aim to deliver social benefits without forgoing their own economic viability, are now emerging in many countries and these also have an important role to play in building resilience.
- Political commitment is necessary to support the development and replication of successful financial innovations.

Summary

In this session, speakers shared experiences with the delivery of microfinance services to households and small and medium enterprises to support coping and rebuilding for disaster victims in Bangladesh, Thailand, and Japan. JICA shared their initiatives for building resilience to climate change in developing countries, including Kenya and the Philippines. The approach of the Save Sanriku Oysters Scheme, which sells shares through the Internet to generate funds for the reconstruction of oyster farms devastated by the earthquake and tsunami that struck Japan in March 2011, was also discussed. This workshop confirmed that microfinance can play a key role in building the resilience of poor households and local communities to the anticipated impacts of more frequent and intense natural disasters resulting from climate change. The workshop discussed the results of a study in northern Bangladesh which found that access to microcredit reduced the vulnerability of households to natural hazards by 16%. Microfinance institutions (MFIs) have introduced an array of mechanisms to assist their clients to cope with and recover from weather-related disaster. For example, most MFIs in Bangladesh allow their members to reschedule their repayments during disasters, and some allow borrowers to renegotiate their loan contracts if the disasters make it difficult for them to meet their repayment schedules. Fresh loans on easy terms are made available immediately after the disaster to allow rural clients to plant crops as soon as possible. For the reconstruction of oyster farms in the Sanriku area, the Internet is being used successfully to generate funds through the sale of shares to any interested individual or group. However, the Save Sanriku Oysters Scheme is facing a new challenge in that false rumors have been spread that the oysters are contaminated with radiation. Examples of social entrepreneurship were discussed, such as Grameen Phone in Bangladesh, and the workshop recognised that markets are important for building resilience. Government also has an important role to play as political commitment is necessary to support the development and replication of successful financial innovations. Key questions for research that were identified are: To what extent can microfinance reduce vulnerability and promote resilience? What types of additional vulnerability reducing measures can be coupled with microfinance.



Lunch Session

IGES WHITE PAPER IV “GREENING GOVERNANCE IN ASIA-PACIFIC”

Overview

Every two years IGES publishes a White Paper on economic, social, and environmental issues in the Asia Pacific region. The 4th White Paper is based on the themes of governance, green economy and sustainable development and offers clear recommendations and cases of good practice on critical issues for the Asia-Pacific region. The authors argue that in order to achieve sustainable development globally significant governance reform is needed in Asia-Pacific, including the development of regional institutions. The 4th White Paper offers innovative approaches to policy and governance to shift the region towards a green economy as a step towards sustainable development.

Launch Discussion

In this special launch session authors reflected on their contribution to the White Paper and the key messages of the publication. Dr. King, the lead author of the White Paper and moderator of this session, commented that it is getting increasingly difficult to get all the countries in the UN system to reach agreement in negotiations, so there is a clear need to focus more on the regional level. In which case the question arises of whether the governance institutions are suitable, and the White Paper says they are good but could be better. In particular a critical factor for facilitating improvements is sharing information and capacity development – which could be well supported by a regional centre. Eventually this centre could lead to a regional agency with authority similar to that of regional organisations in other parts of the world.

List of Speakers

[Moderator]

Dr. Peter King, Senior Policy Advisor, IGES Regional Centre, Bangkok

[Speakers]

Mr. Hideyuki Mori, President, IGES

Mr. Simon Olsen, Researcher, Governance and Capacity Group, IGES

Dr. Yasuhiko Hotta, Deputy Director, Sustainable Consumption and Production Group, IGES

Dr. Enrique Ibarra Gené, Policy Researcher, Natural Resources Management Group, IGES

Mr. Kazuhisa Koakutsu, Deputy Director, Market Mechanism Group, IGES

Dr. Abdesslem Rabhi, Policy Researcher, Kansai Research Centre, IGES

Mr. Toshizo Maeda, Acting Director, Kitakyushu Urban Centre, IGES

Mr. Masanori Kobayashi, Associate Professor, Yokohama National University Graduate School of Environment and Information Sciences

Main Messages of White Paper IV

- Without significant governance reform in Asia-Pacific global sustainable development will remain an under-implemented ideal rather than a new and persistent reality.
- Asia-Pacific stakeholders cannot rely on global reforms alone and must exhibit innovative approaches to governance to address multiple economic, social, and environmental challenges.
- The Asia-Pacific region must show global leadership in addressing these challenges, not only because the region is so vulnerable to the consequences of inaction but also because of its emerging economic and geo-political dominance on the global stage.
- Solutions for many issues are readily available, but information sharing and capacity development are among the main limiting factors and can be readily addressed.
- A key missing ingredient is a sustainable regional institutional arrangement for meaningful and useful information sharing and effective and accessible capacity development. This paper recommends establishing a regional platform to address these needs as a first step towards a regional environmental organisation.



FUTURE DIRECTIONS FOR IFSD: POST RIO+20

Session Outline & Objectives

Several processes related to IFSD were set in motion at Rio+20, including creating a High Level Political Forum for Sustainable Development to replace the Commission on Sustainable Development (CSD), strengthening the United Nations Environment Programme, and a process to determine the functions of a High Level Representative for Future Generations. To ensure that these processes can deliver, actions at the global intergovernmental levels, is not enough, actions at regional, national and local levels are also necessary, as well as in sectors and by actors not traditionally associated with the sustainability agenda. Contributing to the idea of 'bringing the Rio+20 outcomes home', this session explored the implications in Asia and discussed which institutional changes are needed at regional, national and local levels, as well as how to integrate different economic sectors.

List of Speakers

[Moderator]

Mr. Kazuhiko Takemoto, Senior Advisor to Minister of the Environment / Senior Fellow, United Nations University Institute of Advanced Studies (UNU-IAS)

[Speakers]

Ms. Tomoko Nishimoto, Director, Division of Regional Cooperation (DRC), United Nations Environment Programme (UNEP)

Dr. Hoi-seong Jeong, President Emeritus, Korea Environmental Policy and Administration Society

Dr. Monthip Sriratana Tabucanon, Senior Adviser, Senate Commission on Natural Resources and Environment, Office of the Parliament, Thailand

Mr. Surendra Shrestha, Director & Focal Point for Sustainable Development Goals (SDGs) at Rio+20 Secretariat

Dr. Mark Elder, Director, Governance and Capacity Group, IGES

Mr. Simon Olsen, Researcher, Governance and Capacity Group, IGES

Key Messages

- **Upgrading and strengthening UNEP, increasing its budget, universal membership are specifically called for in the Rio+20 outcome document and UNEP is ready to assist international organisations and member states in Asia Pacific region in various areas including capacity building, information sharing and science policy interface.**
- **Sustainable development strategies remained at the fringes of political decision making. To rectify this situation, buy-in at the highest level and necessary partnerships and participation must be ensured.**
- **The main beneficiaries of green growth and green governance should be to the poor and not only to businesses.**
- **Sustainable development is an answer to the economic and financial crisis by promoting tax reforms that encourage environmental protection and help the poor.**
- **Asia should lead by example in sustainable development and spread its good philosophy and practice to other regions.**

Summary

Ms. Nishimoto reminded the audience that upgrading and strengthening UNEP, increasing its budget, and universal membership are specifically called for in the outcome document and UNEP is ready assist international organisations and member states in Asia-Pacific in various areas including capacity building, information sharing and science policy interface. She pointed out that incentives are lacking and some kind of reward system should be a part of environmental governance. Mr. Olsen's view was that sustainable development strategies remained at the fringes of political decision making and to rectify this situation, high level buy-in as well as partnerships and participation must be ensured. He also added that research based on natural science as well as social science should be brought in to assist governmental decision making to a greater extent than at present. Dr. Jeong addressed the importance of green governance including civil society as social partner and of ensuring the main beneficiaries of green growth and green governance be the poor and not just businesses. Dr. Tabucanon shared her experience in the Thai parliament and said political commitment for sustainable development is the most important and that low awareness on sustainable development among Thai parliamentarians is a problem and led to the situation where it is difficult to get funding for sustainable development related activities from the line ministries. Dr. Elder pointed out that regional sustainable development governance is characterised by overlaps and fragmentation and issues are not well addressed but regional institutions have an important role in implementing necessary measures agreed at Rio+20 such as in capacity building, information sharing, and monitoring. Mr. Shrestha emphasised that Asia should lead by example in sustainable development and spread its good philosophy and practice to other regions. He also added that the 67th UNGA will be extremely important as all the translation of Rio+20 outcome document will come into force. It is important to ensure the appropriate language is there.

GOOD PRACTICES AND LESSONS LEARNED FROM MEASUREMENT, REPORTING AND VERIFICATION (MRV) OF MITIGATION ACTIONS TOWARDS THE LOW CARBON DEVELOPMENT IN ASIA

Session Outline & Objectives

MRV (Measurement, Reporting, and Verification) of greenhouse gases (GHG) is essential to establish a low-carbon society. In this session participants discussed options and issues related to the methodological and institutional frameworks for MRV of GHG emissions as well as emissions reduction, based on good practices and lessons learned from both developed and developing countries. Also discussed was how to establish effective methodologies and implementing institutions in Asia in the post-2012 climate regime from technical and political aspect.

List of Speakers

[Moderator]

Mr. Taka Hiraishi, Senior Consultant, IGES (IPCC Inventories Programme Co-chair)

[Keynote Speaker]

Mr. Rae Kwon Chung, Director, Environment and Development Division, United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)

[Speakers]

Ms. Mayumi Ishii, CSR and Environmental Management Division, LIXIL Corporation

Dr. Pongvipa Lohsomboon, Director of Carbon Business Office, Thailand Greenhouse Gas Management Organisation (TGO)

Dr. Yasushi Ninomiya, Director, Market Mechanism Group, IGES

Mr. Kazuhisa Koakutsu, Deputy Director, Market Mechanism Group, IGES

Key Messages

- Relative decoupling of growth and CO₂ emissions remains important while many countries have started to mainstream low-carbon in their development strategies. MRV of NAMAs (Nationally Appropriate Mitigation Actions) could also be supported by the greenhouse gases (GHGs) inventory. Carbon pricing such as emission trade scheme (ETS) is also an important tool.
- Many Asian countries such as China, Korea, Indonesia and Thailand are looking at ways to manage GHGs. The government of Thailand, for example, has started to establish a voluntary domestic carbon market – Thai Voluntary Emission Reduction (T-VER) and Thai Voluntary Emission Trading Scheme (TVETS).
- Since MRV of mitigation actions is one of the key components to assist the development of low carbon economy and growth, it is necessary to conduct capacity building for development of MRV methodology, pilot testing of MRV and the MRV institutional framework.
- The experience in GHG-MRV under Japan's Voluntary Emission Trading Scheme (JVETS) shows that private companies can benefit by adopting systematic/robust MRV system to control their GHG emission.
- GHG-MRV can be classified as different types in accordance with purpose, object, methodology and subject. Clarification is necessary for which type of MRV is concerned when talking about "MRV" since their characteristics substantially vary. Further research is required for MRV of GHG reduction by policy and actions.

Summary

Mr. Chung noted that MRV is an important aspect in the formulation of low-carbon development, adding that we should aim at relative decoupling of growth and CO₂ emissions. Many countries have started to mainstream low-carbon in their development strategies, while MRV of NAMA could be supported by GHG inventory. He concluded that carbon pricing such as ETS is also an important tool. Mr. Koakutsu explained that many Asian countries such as China, Korea, Indonesia and Thailand are looking for a way to manage GHGs. Since MRV of mitigation actions is one of the key components to assist the development of low-carbon economy and growth, capacity building for development of MRV methodology, pilot test of MRV and MRV institutional framework is necessary. Ms. Ishii presented good practices and lessons learned from the GHG-MRV experience in JVETS. She showed that private companies can benefit by adopting systematic/robust MRV system to control their GHG emission, since such MRV system can lead to increased capacity for monitoring, transparency of data, accuracy of measurement, completeness of including GHG sources within boundaries, improvement of monitoring methods and efficient third-party verification, which are all relevant to capability in GHG risk management. Dr. Pongvipa shared project level MRV experiences in Thailand where they have started to establish voluntary domestic carbon market (T-VER and T-VETS) to achieve three objectives; (1) support voluntary GHGs reduction activities, (2) learn how to manage domestic emission trading and carbon offsetting, (3) encourage private companies to reduce their GHG emissions. The emission reduction target in Thailand will be announced in the end of this year. Dr. Ninomiya suggested that GHG-MRV can be classified as 4 types in accordance with purpose, object, methodology and subject; (1) GHG emission at entity level, (2) GHG reduction at project level for crediting, (3) GHG emission at national level (4) GHG reduction by policy and actions. It was stressed that we need to clarify which type of MRV is concerned when talking about "MRV" since their characteristics and policy implications are substantially different each other. He also emphasised that further research is particularly required for MRV of GHG reduction by policy and actions.



KNOWLEDGE MANAGEMENT AND COMMUNITY OF PRACTICE FOR SUSTAINABLE DEVELOPMENT

Session Outline & Objectives

The session consisted of two presentations and a panel discussion facilitated by the moderator. The presentations served to understand how an organisation can set up and operate a “Community of Practice” (CoP) as a mean of sharing and managing knowledge among peers and diverse stakeholders, and to discuss how it can evolve to facilitate consultation process, problem solving, and agenda setting for sustainable development. The speakers and panellist shared their experience and views to identify key elements for the successful conduct of a CoP as well as potential pitfalls to avoid. Panel discussion further examined a few examples to draw lessons for operating CoPs and encouraged participants to get involved in CoPs in their activities, where appropriate.

List of Speakers

[Moderator]

Dr. Daisuke Sano, Director, IGES Regional Centre, Bangkok

[Speakers]

Mr. David Galipeau, Knowledge and Innovation Management Practice Leader, UNDP Asia Pacific Regional Centre, Bangkok

Ms. Hina Lotia, Regional Coordinator, Asia, Climate & Development Knowledge Network (CDKN) / General Manager, Programme Development Department, LEAD Pakistan

[Panellist]

Dr. Peter King, Senior Policy Advisor, IGES Regional Centre, Bangkok

Key Messages

- Knowledge management should be designed in such a way that effective application of lessons occurs continuously throughout the duration of any given project.
- A Community of Practice can serve as a platform where practitioners can share and generate knowledge in a virtual space and induce innovations for resilience and sustainability at various levels of policy processes.
- A successful Community of Practice must identify specific issues to solve, members with the right expertise, and moderators to facilitate evidence-based discussion – thereby distinguishing it from a simple web platform or social media.
- A Community of Practice will function more effectively if outputs and incentives for participation are clearly defined and combined with face-to-face meetings at critical points of the project.

Summary

Mr. Galipeau introduced the audience to the concept of a CoP which can foster dialogues and generate innovative ideas. Successful CoP operations can deal with transboundary, cross-sectoral, or politically sensitive issues, leading to informed decision making, faster plan-to-action transitions, better valuation of resources, and identification of emerging challenges, stating that “creating professional networks and linking them to government can empower the community of practice to influence development policy.” Ms. Lotia illustrated ways to build a CoP based on activities of CDKN which brings together private sector, non-profit, grass-roots, and international and local organisations. Ms. Lotia pointed out that the purpose, outputs and incentives for participation should be well defined in order to engage development practitioners in CoP - “Everyone is busy. Participating in CoP will never be priority no.1. So we need to pinpoint the purpose, outputs, and give incentives.” The panellist, Dr. King pointed out that new perspectives are needed in order to generate innovation through “out of the box” thinking. Dialogue with the presenters highlighted the need to foster real expertise in the emerging area of climate change instead of rebranding old development practitioners. From the floor a question was asked about a CoP addressing several topics, to which the speakers responded that discussing various topics is not necessarily condemned, but a balance is needed to maintain focus, as diluted discussions will cause participants to lose interest. In conclusion, Dr. Sano emphasised that a CoP can effectively mobilise untapped resources (experience-based knowledge) that practitioners possess despite the widespread availability of communication media. Rigour is needed in redefining knowledge management and what can be delivered by a CoP as a means.



Workshops

EXPLORING DEVELOPMENT OF NAMAS AND MRV IN SOUTHEAST ASIA: CHALLENGES AND OPPORTUNITIES TOWARDS LOW CARBON DEVELOPMENT PATHWAYS

Focusing on Cambodia, Laos, Thailand, and Viet Nam and Indonesia, this closed expert session aimed to explore and identify 1) domestic climate change mitigation efforts and their practical challenges, 2) current status and preparedness for developing transparency system (domestic MRV) and 3) existing support available to prepare and implement domestic mitigation actions and MRV system on the ground. Mitigation efforts vary country to country. While Indonesia and Cambodia have submitted NAMA to the UNFCCC, Thailand, Viet Nam and Laos have not. However, presentations from officials in charge of climate change portfolios in each country showed that whether or not NAMA of each country has already been submitted to the UNFCCC, in general, there have already been vigorous mitigation efforts including MRV system by these countries, though to a different degree depending on their capacity. Nevertheless, all countries face challenges to further advance mitigation efforts, and thus international support in terms of finance, capacity building and technical transfer would be essential.

IGES/SCP EXPERT WORKSHOP ON ENERGY EFFICIENT HOUSING IN ASIA

The workshop discussed the current status of energy efficient housing (EEH) in China, India and Japan. Partners in an ongoing research project led by IGES presented their initial findings on stakeholder barriers and policy initiatives in China and India. These findings emphasised the crucial role played by governments in setting appropriate standards on EEH and in creating incentives for improved efficiency. Both China and India have a number of governmental policies in place for promoting energy efficiency and have made significant progress on EEH. However, their policy mixes still have some serious gaps and weaknesses and suffer from weak implementation. Common barriers identified include: low energy prices, billing systems that provide no incentives for energy saving, low awareness among consumers, and lack of confidence in new energy saving appliances. It was also observed that stakeholders have very different opinions on the cost difference between a conventional building and an energy efficient one. A presentation on voluntary guidelines on EEH in Japan illustrated the significance of verified technical data for improving EEH practices. Such authoritative guidelines in support of building practices that go beyond legal EEH requirements are currently lacking in developing Asian countries.

URBANISATION KNOWLEDGE PLATFORM FOR LOW-CARBON CITIES

This workshop was convened for reviewing two studies on creating low carbon cities, one on new policy direction on institutional reforms and technical innovations, which are core for creating low carbon city under energy supply crisis, and the second on behaviours of municipal governments, private companies and citizens, and future challenges for international cooperation and technical transfers. In addition, the platform, called "Urban Knowledge Platform for Low-Carbon Cities," will be built based on the discussions in this workshop for developing opportunities of information sharing among municipality governments, private companies, universities, research institutes and others, and promoting co-operation between the different stakeholders. Four sessions were held with 20+ invited experts. In Session 1, "Current status related to low carbon city creation," promotion of PV panel and EV vehicles, green electricity purchase, and relative practices from each municipality were introduced. Speakers provided information of operations on business and municipal governments as related to citizen's lifestyles. In Session 2, "Low carbon business and globalisation," green business and funding mechanisms for creating smart city and future challenge for international technical cooperation, etc. were presented. The usefulness of these elements for disseminating Japanese technology in the world market, especially Asia was discussed. In Session 3, "Inter-city cooperation for low carbon society creation," international technical cooperation, capacity/knowledge building cooperation and implementation of inter-city cooperation, etc. were introduced from municipal government and research institutes. In Session 4, "Lifestyle change and low carbon city creation," future challenge for transferring into sustainable lifestyle was proposed. Awareness-raising among citizens on environmental issues will be the key to change into eco-friendly lifestyles, while multi-stakeholder networking will be a good opportunity for sharing information on these topics.

Special Events

● IGES-TERI Joint Symposium

INDIA-JAPAN TECHNOLOGY COOPERATION TOWARDS SUSTAINABLE DEVELOPMENT

Summary

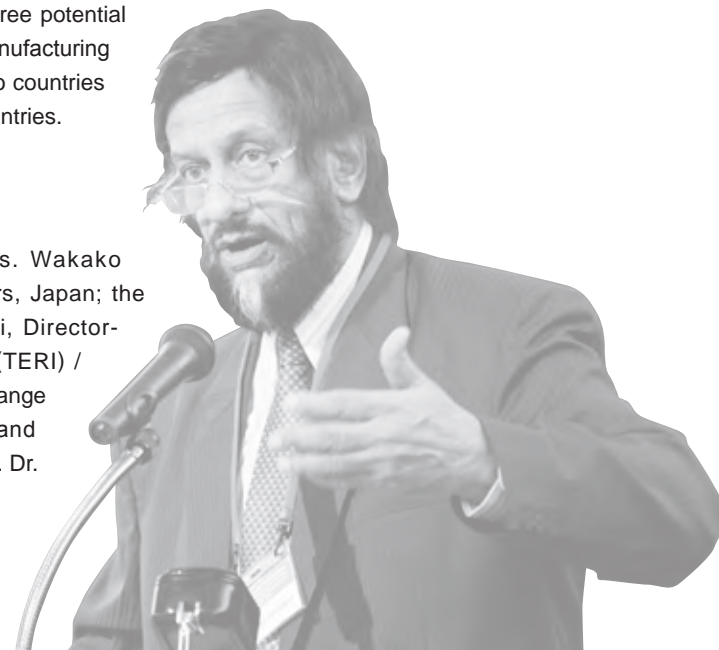
The joint IGES-TERI symposium was a special event to mark the 60th Anniversary of India-Japan diplomatic relations. It was an opportunity to discuss various forms of cooperation between India and Japan that contribute to sustainable development in Asia based on a wide range of knowledge and personnel exchange that the two countries have shared various fields. The symposium provided insight on the following points:

- Technological priorities for promotion of sustainable development;
- Areas for collaborative R & D;
- Policy framework for technological innovations;
- Engaging all stakeholders for technology innovations.

The symposium attracted high level political figures and business leaders who shared the stage with leading-edge researchers and active members of international organisation and financial institutions. Mr. Hideyuki Mori, President, IGES welcomed participants to the symposium. Guest remarks were made by Mr. Hideki Minamikawa, Vice Minister of the Environment, Japan; Mr. Sandeep Dikshit, Member of Parliament, India and by Dr. Chadaram Sivaji, Counselor of Science and Technology, Embassy of India. Three potential areas of cooperation were identified – energy, manufacturing and agriculture, while the cultural aspect of the two countries was noted as an important basis for linking the countries.

Keynote Session

The keynote session was moderated by Ms. Wakako Hironaka, Former Member, House of Councilors, Japan; the keynote speakers were Dr. Rajendra Pachauri, Director-General, The Energy and Resources Institute (TERI) / Chair, the Intergovernmental Panel on Climate Change (IPCC) and Mr. Masakazu Toyoda, Chairman and CEO, Institute of Energy Economics, Japan (IEEJ). Dr.



Bindu Lohani, Vice President, ADB joined as a discussant. Dr. Pachauri expressed that the time has come for Asian countries to create a model of sustainable development that would be a showcase for the rest of the world. Japan and India, as leading countries will have to work together toward this goal. Dr. Pachauri noted that given the large scientific and technical manpower that India has, and with the establishment of clear intellectual property right (IPR) system, there is enormous opportunities to develop technology jointly between India and Japan, especially for renewable energy. Mr. Masakazu Toyoda highlighted specific areas for cooperation, noting energy demand in India is growing and will continue to grow and the security of energy supply is an urgent and crucial policy issue for that country. Several specific areas were mentioned where both countries can cooperate, such as 1) energy efficiency and conservation; 2) new and renewable energy; 3) fossil fuel power generation; and 4) nuclear energy. Dr. Lohani described the importance of promoting technology for sustainable development, and pointed out four promising areas for cooperation between Japan and India, where ADB has been working, 1) energy efficiency, 2) solar, 3) transport, and 4) water management.

Panel Session I: Business Agenda

[Moderator]

Prof. Ryokichi Hirono, Professor Emeritus, Seikei University

[Panellists]

Mr. Yoshikuni Hirayama, Director, Overseas R&D Promotion Center, Panasonic Corporation

Dr. Michinori Kutami, Principal Technologist, Corporate Environmental Strategy Unit, Fujitsu Limited

Mr. Sanjeev Sinha, President, Sun and Sands Advisers

Mr. Girish Sethi, Director, Industrial Energy Efficiency Division, The Energy and Resources Institute (TERI)

[Discussant]

Ms. Tomoyo Nonaka, Chairman, NPO Gaia Initiative

Mr. Hirayama introduced the activities of Panasonic India Pvt.Ltd in India. In term of R&D in India, they are collaborating universities, business, ICT companies, etc. on green innovation. Their main focus is on: 1) Environment, through developing business focusing on water quality and management; 2) Energy, through providing energy saving and cost saving products; and 3) Healthcare, through providing product range that suit to local lifestyle. He noted that finding the appropriate partner(s) in each technological area and the localisation of the factory are among the biggest challenges facing them. Dr. Kutami emphasised the contribution of information and communication technologies (ICT) in energy saving and emission reduction. He introduced the efforts of Fujitsu group regarding "Green ICT projects". Mr. Sinha proposed the establishment of an integrated technology partnership platform, based on the comparative advantage of each country and noted that mutual collaboration requires a strategic and holistic approach. He also noted differences in business practice and environment requires more efforts for mutual understanding. Mr. Sethi focused on Research, Development, Demonstration and Deployment (RDD&D), arguing that collaborative RDD&D projects can play a vital role in enhancing technological capacities in India and introduced several unique RDD&D initiatives conducted by TERI with Indian SMEs. Sharing of knowledge and expertise by foreign experts in such projects are vital for their success. In addition, anchoring the technology in intermediaries such as local R&D/ academic institutions will ensure sustainable replication of the demonstrated technologies. Ms. Nonaka, as a commentator, felt that there is a lot for Japan to learn from India, especially in term of ICT.

Panel Session II: Policy Agenda

[Moderator]

Prof. Hironori Hamanaka, Chair of the Board of Directors, IGES

[Panellists]

Dr. Sadao Wasaka, Executive Director, New Energy and Industrial Technology Development Organization (NEDO)

Dr. Kotaro Inoue, Principal Fellow, Research Partnership for Sustainable Development Division, Japan Science and Technology Agency (JST)

Prof. Yutaka Suzuki, Director-General, Kansai Research Centre, IGES

[Discussants]

Ms. Shailly Kedia, Associate Fellow and Area Convener, Green Growth Strategies Area, The Energy and Resources Institute (TERI)

Mr. Akira Nitta, Director, International Cooperation Office, Ministry of the Environment, Japan

Prof. Suzuki pointed out the importance of Business to Business (B to B) initiatives in the development and transfer of technologies, arguing that other stakeholders, such as governmental agencies, NGOs, research institutes, academia, and so on, should play a facilitator role to promote B to B initiatives. He introduced an ongoing project conducted jointly by IGES and TERI to apply Japanese low carbon technologies in Indian SME which includes actual implementation of pilot projects using Japanese technologies such as electric heat pumps and gas heat pumps, in selected Indian sites. Dr. Inoue stressed the importance of science and technological collaborations for sustainable development based on the experience of SATREPS. In this regard, he outlined the framework of SATREPS and introduced several SATREPS projects which have been implemented in India and other countries worldwide. Dr. Wasaka enumerated several demonstration projects conducted by NEDO in India for renewable energy, energy efficiency, and capacity building. He felt that policy support is indispensable for the implementation of demonstration projects and the dissemination of green technologies and recommended the use of the following: generous feed-in tariff scheme for renewable energy; subsidies for green technology installation; PR activities for green technologies; and development of adequate environmental regulations. Based on a research study conducted jointly by IGES and TERI, Ms. Kedia felt the private sector should play a key role in technology development and transfer, while central and local governments should play the role of facilitator to speed up private sector initiatives by creating an enabling environment for businesses in both countries to interact. In addition, she stated that technology development and transfer can be enhanced through unilateral initiatives such as the PAT scheme or the National Action Plan in India; and/or through bilateral mechanism, such as the BOCM between Japan and India; and/or through multilateral mechanisms such as the CDM scheme. Mr. Nitta highlighted MOEJ and METI involvement in various projects for the diffusion of Japanese energy efficiency technologies to India, noting that there are various policy dialogues ongoing between India and Japan to strengthen their technological cooperation. In this regard, he emphasised that the BOCM scheme between both countries could be a good alternative to the CDM to promote the diffusion of Japanese technologies in India; however he recommended that India and Japan have to work together to overcome the MRV issues related to BOCM.

● Interactive Sessions

Interviews were conducted by young researchers from IGES to get an in-depth understanding on the experiences and insights of prominent guest speakers followed by a Q&A session with the audience. These sessions were carried out away from the plenary sessions, allowing for close dialogue between young researchers, ISAP audience members, and the invited speakers. This year's interviewees were:

Dr. Rajendra K. Pachauri, Director-General, The Energy and Resources Institute (TERI) / Chair, The Intergovernmental Panel on Climate Change (IPCC)

Mr. Rae Kwon Chung, Director, Environment and Development Division, United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)

Prof. Dr. Miranda A. Schreurs, Director of the Environmental Policy Research Institute, The Freie Universität Berlin



● ISAP2012 Exhibition

ISAP2012 held an exhibition and poster display on the main floor with outputs of the latest research activities at IGES as well as attractive displays from sponsors and related organisations including:

- IGES inputs to Rio+20
- IGES White Paper IV – Greening Governance in Asia-Pacific
- Students’ Poster Session
- Photo Exhibition “The 60th Anniversary of India-Japan Diplomatic Relations”
- Sponsors exhibitions



● Students’ Poster Session

A poster session was held to give young researchers and students a chance to participate and exchange views on their research ideas with participants at ISAP2012. As a start-up event, this year’s posters were provided by graduate students from three universities in Kanagawa Prefecture associated with IGES – Yokohama National University, Yokohama City University and Keio University Shonan Fujisawa Campus. Thirteen posters were submitted and all ISAP speakers were requested to give an evaluation. The final selection



was made by a selection committee chosen from among the invited plenary session speakers as well as representatives of the co-organisers of ISAP, IGES and UNU-IAS. The selection committee presented an award of excellence to three posters: Ms. Rua Samara, Mr. Tomoki Kobayashi and Ms. Ong Ke Shin.



● Photo Exhibition

“HISTORY OF JAPAN-INDIA EXCHANGE”

The Japan-India Association kindly provided extraordinary photos exhibiting the early years of the relationship between Japan and India. The Japan-India Association was first established in 1903 as an institution to promote Japan-India relations. A formal peace treaty was subsequently signed and this year, 2012, marks the 60th Anniversary of the establishment of diplomatic relations between Japan and India. With this photo exhibition, the general public could view a selection of valuable and historical photos taken over the last one hundred years from around the time the Japan-India Association was established.



Programme

Day 1 24 July [Tue]

9:00-9:15 Opening Session

Opening

Room 503

Welcome Remarks

Prof. Hironori Hamanaka, Chair of the Board of Directors, IGES

Guest Remarks

Mr. Tatsushi Terada, Vice-Minister for Global Environmental Affairs, Ministry of the Environment, Government of Japan
Mr. Masao Kurokawa, Vice Governor, Kanagawa Prefectural Government

9:15-10:45 Plenary Session 1

Green Economy for Sustainable Development

Room 503 [P-1]

Through the process of Rio+20, a green economy is now recognised as an important tool available for achieving sustainable development. Positive expectations include its contribution to poverty eradication, economic growth, social inclusion, human welfare, employment and decent work. On the other hand, there are concerns about risks that need to be carefully avoided, for example, the concept and practice of green economy could be taken as unjustifiable discrimination or disguised restriction on finance and international trade. This session addresses how the global trend for shifting towards green economy may affect decisions and actions taken by countries and relevant organisations from diverse perspectives including climate change, energy security, and funding.

[Moderator]

Prof. Hironori Hamanaka, Chair of the Board of Directors, IGES

[Keynote Speakers]

Dr. Rajendra K. Pachauri, Director-General, The Energy and Resources Institute (TERI) / Chair, The Intergovernmental Panel on Climate Change (IPCC)
Dr. Bindu N. Lohani, Vice President, Knowledge Management and Sustainable Development, Asian Development Bank (ADB)

[Discussant]

Dr. Naoko Ishii, Deputy Vice Minister of Finance for International Affairs, Ministry of Finance, Government of Japan

11:00-12:30 Parallel Sessions

East Asia Knowledge Platform for Low Carbon Growth – Knowledge in Action for Policy and Investment

Room 503 [S1-1]

If rapidly growing Asian countries fail to make investments towards low-carbon societies in an intensive manner, they will be locked into carbon-intensive development paths for the upcoming half-century. Therefore, it is imperative that we orchestrate our knowledge and expertise from around the region as well as the necessary funds in order to steer towards low-carbon and green growth societies in an urgent fashion. On the occasion of the ISAP2012, we would like to engage in frank discussion on how to forge consensus in moving towards low-carbon societies, exchange necessary knowledge, build a substantial linkage between that knowledge and policies, and facilitate wise and effective investments towards low-carbon sustainable societies in a way that fosters active participation from like-minded stakeholders concerned.

[Moderator]

Mr. Hideyuki Mori, President, IGES

[Keynote Speakers]

Mr. Masaya Fujiwara, Principal Fellow, Programme Management Office, IGES
Mr. Junya Nakano, Senior Negotiator, Climate Change Division, International Cooperation Bureau, Ministry of Foreign Affairs

[Speakers]

Dr. Shuzo Nishioka, Secretary General, International Research Network for Low Carbon Societies (LCS-RNet) / Senior Research Advisor, IGES
Dr. Junichi Fujino, Senior Researcher, Center for Social and Environmental Systems Research, National Institute for Environmental Studies (NIES)
Mr. Kyosuke Inada, Deputy Head and Advisor, Office for Climate Change, Global Environment Department, Japan International Cooperation Agency (JICA)

[Discussants]

Dr. Rajendra K. Pachauri, Director-General, The Energy and Resources Institute (TERI) / Chair, The Intergovernmental Panel on Climate Change (IPCC)
Dr. Bindu N. Lohani, Vice President, Knowledge Management and Sustainable Development, Asian Development Bank (ADB)
Mr. Ash Sharma, Vice President, Carbon Finance and Funds, Nordic Environment Finance Corporation (NEFCO)
Prof. Rizaldi Boer, Executive Director, Centre for Climate Risk and Opportunity Management in Southeast Asia and Pacific, Bogor Agriculture University, Indonesia
Prof. Jiang Kejun, Research Professor, Energy Research Institute, National Development and Reform Commission, PRC
Prof. Ram Manohar Shrestha, Emeritus Professor, Asian Institute of Technology

Urban Challenges for a Green and Smart Economy

Room 502 [S1-2]

Measures towards a “Green Economy” are taken around the globe including Japan. In this session, the business model for “smart cities” will be outlined, followed by actual measures taken by Iskandar Malaysia, Yokohama city and Kawasaki city. The aim of the session will be to highlight and discuss issues that need to be handled along with directions of future policies in order to achieve a green economy. In addition, this session aims at stimulating new measures towards a “Green Economy” with the common understanding generated by the discussion.

[Moderator]

Prof. Hidefumi Imura, Senior Policy Advisor & Senior Fellow, Programme Management Office, IGES

[Keynote Speaker]

Mr. Yosuke Mochizuki, Director, Nikkei BP Cleantech Institute

[Speakers]

Prof. Dr. Ho Chin Siong, Deputy Director, Office International Affairs, Universiti Teknologi Malaysia
Mr. Masato Nobutoki, Executive Director for the FutureCity Promotion, City of Yokohama
Ms. Yoko Maki, Executive Director, Global Environment Knowledge Centre, Environment Bureau, Kawasaki City

[Panellists]

Prof. Wanxin Li, Assistant Professor, City University of Hong Kong, China
Dr. Akira Ogihara, Senior Coordinator, Governance and Capacity Group, IGES
Dr. Abdessalem Rabhi, Policy Researcher, Kansai Research Centre, IGES
Mr. Lewis Akenji, IGES Fellow

Sustainable Development Goals - The Road Ahead

Room 411&412 [S1-3]

A broad framing of the future SDGs was agreed in Rio. The coming years will be defining if the goals can help reorient global economic and development activities onto the right path towards sustainability. Implementation toward these goals necessitates better monitoring and governance mechanisms. At this critical juncture, 20 years after the Rio Earth Summit, we will discuss how important it is to look at similar efforts in the past and draw lessons and identify barriers to their effective implementation. We must also find ways to effectively operationalise the goals, targets and indicators at national and local levels, to achieve sustainable development.

[Moderator]

Prof. Norichika Kanie, Associate Professor, Department of Value and Decision Science, Graduate School of Decision Science and Technology, Tokyo Institute of Technology

[Speakers]

Mr. Surendra Shrestha, Director & Focal Point for Sustainable Development Goals (SDGs) at Rio+20 Secretariat
Ms. Masnellyarti Hilman, Deputy Minister for Hazardous Substances, Hazardous Waste and Solid Waste Management, Ministry of Environment, Republic of Indonesia
Dr. Atsushi Suginaka, Director, Global Environment Division, International Cooperation Bureau, Ministry of Foreign Affairs of Japan
Dr. Mark Elder, Director, Governance and Capacity Group, IGES
Mr. Tetsuro Yoshida, Researcher, Governance and Capacity Group, IGES

12:40-14:05 Lunch Session**• UNEP GEO5 / Global Outlook on SCP Policies Presentation****Room 502 [L-1]**

The audience will have a unique opportunity to hear about two of UNEP's major publications -the flagship Global Environmental Outlook (GEO5), and the Global Outlook on Sustainable Consumption and Production (GO SCP). IGES researchers were closely involved in the publication of the regional chapters and together with UNEP will present the major findings followed by exchange between the two presenters on commonalities and implications for Asia-Pacific.

[Moderator]

Dr. Peter King, Senior Policy Advisor, IGES Regional Centre, Bangkok

[Speakers]

Ms. Anna Stabrawa, Regional Coordinator for Early Warning & Assessment, United Nations Environment Programme (UNEP)

Mr. Lewis Akenji, IGES Fellow

[Discussants]

Dr. Young-Woo Park, Regional Director & Representative for Asia and the Pacific, United Nations Environment Programme, Regional Office for Asia & the Pacific (UNEP-ROAP)

Dr. Bindu N. Lohani, Vice President, Knowledge Management and Sustainable Development, Asian Development Bank (ADB)

14:15-15:45 Plenary Session 2**• Resilience: Key Element for Building Sustainable Society****Room 503 [P-2]**

Resilience is identified as one of the key elements of sustainable development. Recovery from the triple disasters in Tohoku region in Japan, including Fukushima, remains an enormous challenge, while many Asian countries face the urgent need to enhance resilience for diverse issues including climate change adaptation. This session will welcome a former Environment Minister from Germany and the Director of the Division of Regional Cooperation at UNEP to share perspectives on resilience and natural disasters.

[Moderator]

Mr. Kazuhiko Takemoto, Senior Advisor to Minister of the Environment / Senior Fellow, United Nations University Institute of Advanced Studies (UNU-IAS)

[Keynote Speakers]

Prof. Dr. Klaus Töpfer, Executive Director, Institute for Advanced Sustainability Studies e.V. (IASS)

Prof. Kazuhiko Takeuchi, Vice Rector, United Nations University (UNU)

Ms. Tomoko Nishimoto, Director, Division of Regional Cooperation (DRC), United Nations Environment Programme (UNEP)

16:00-17:30 Parallel Sessions**• Effective Decontamination in Fukushima and Experiences in Europe****Room 503 [S2-1]**

After the Chernobyl nuclear accident in 1986, actions were taken by various countries in Europe to implement decontamination, and following this, a total of 50 research and disaster-related organisations from 23 countries under the European Commission took part in the development of an on-line system and set of guidelines for emergency decision support. Inviting experts from Europe based on their experience and knowledge developed in Europe as well as field survey in Fukushima, this session promotes public discussion on how to best proceed effectively with full-scale decontamination on a national and local level from this fiscal year.

[Moderator]

Mr. Hideyuki Mori, President, IGES

[Keynote Speakers]

Dr. Hiroshi Suzuki, Professor Emeritus, Fukushima University / Chair, Fukushima Prefecture Reconstruction Committee

Mr. Kuniaki Makiya, Deputy Director General for Decontamination, Ministry of the Environment, Japan

Mr. Masamitsu Kogota, Senior Policy Administrator of Environmental Recovery Sector, Social Affairs & Environment Department, Fukushima Prefectural Government

[Panellists]

Dr. Viktor Averin, Director, Research Institute of Radiology, Belarus

Mr. Gilles Hériard-Dubreuil, President, MUTADIS, France

Prof. Wolfgang Raskob, Professor, Karlsruhe Institute of Technology (KIT), Germany

Prof. Eduardo Gallego, Director, Nuclear Engineering Department, Technical University of Madrid, Spain

Prof. Dr. Miranda A. Schreurs, Director of the Environmental Policy Research Institute, The Freie Universität Berlin

Prof. Sachihiko Harashina, Professor, Faculty of Policy Informatics, Chiba University of Commerce / Professor Emeritus, Tokyo Institute of Technology

• The Satoyama Initiative and Resilience – Pathways to a Sustainable Society –**Room 502 [S2-2]**

To cope with the rising pressures of environmental change, global biodiversity loss, and extreme natural hazards such as the Great East Japan Earthquake and Tsunami, societies need to build and enhance the resilience in the face of future disturbances. The Satoyama Initiative aims to conserve sustainable human-influenced natural environments (Socio-Ecological Production Landscapes and seascapes; SEPLs) through broader global recognition of their value. Its focus on the scientific aspects of human-nature interactions in SEPLs provides insight into the importance of promoting resilience. This session will illustrate the diverse benefits obtained through SEPLs and explore possible means to integrate this notion within environmental policy decisions.

[Moderator]

Prof. Alfred Oteng-Yeboah, National Chairman, Ghana National Biodiversity Committee

[Panellists]

Dr. Krishna Chandra Paudel, Secretary, Eastern Regional Administration Office, Ministry of Home Affairs, Government of Nepal

Ms. Joji Cariño, Policy Advisor and Team Leader, Indigenous Peoples Capacity-Building Project for CBD Implementation, Indigenous Peoples' International Centre for Policy Research and Education (TEBTEBBA)

Mr. Katsuhiko Tada, President, Tada Organic Farm Co., Japan

[Discussants]

Dr. Ryo Kohsaka, Visiting Research Fellow, United Nations University Institute of Advanced Studies (UNU-IAS) (Operating Unit Ishikawa Kanazawa: OUIK) / Associate Professor, Faculty of Human Sciences, Institute of Human and Social Sciences, Kanazawa University

Dr. Kalemani Jo Mulongoy, Visiting Professor, United Nations University Institute of Advanced Studies (UNU-IAS)

• Energy Efficient Housing in Asia - Barriers and Policy Drivers**Room 411&412 [S2-3]**

The combination of rapidly changing urban housing patterns and concerns over energy security makes energy-efficient housing (EEH) a critical issue for developing Asia. We must discuss the barriers that stakeholders face in uptake, and how government policies can facilitate a transition to more sustainable housing. This session addresses the above questions, drawing from initial findings from research projects currently being implemented in China, India, Thailand and the Philippines.

[Moderator]

Dr. Magnus Bengtsson, Director, Sustainable Consumption and Production Group, IGES

[Speakers]

Mr. Lewis Akenji, IGES Fellow

Dr. Patrick Schroeder, International Advisor, China Association for NGO Cooperation (CANGO), China

Mr. Sangeeth Varghese, Chairman and Managing Director, LeadCAP Knowledge Solutions Private Limited, India

Mr. Fei Guo, Researcher, Sustainable Consumption and Production Group, IGES

[Discussants]

Prof. Hideo Imura, Senior Policy Advisor & Senior Fellow, Programme Management Office, IGES

Ms. Ikuyo Kikusawa, Policy Researcher, Kitakyushu Urban Centre, IGES

• Resilient Energy System towards Green Economy [Japanese only]**Room 414&415 [S2-4]**

The Great East Japan Earthquake and the Fukushima nuclear accident revealed the necessity of resilient energy system to realise green economy. Based on recent energy scenario studies including an IGES study, this session will discuss key challenges and necessary actions to promote resilient energy system in wider perspective including a resilient regional economy as well as a resilient energy supply against disasters.

[Moderator]

Dr. Satoshi Kojima, Director, Economy and Environment Group, IGES

[Keynote Speakers]

Prof. Hiroyuki Uesaka, Professor, Faculty of Child Development and Education, Toyama University of International Studies
Dr. Takeshi Kuramochi, Associate Researcher, Climate Change Group, IGES

[Panellist]

Prof. Hiroki Hondo, Professor, Graduate School of Environment and Information Sciences, Yokohama National University

Day 2 25 July [Wed]**9:00-10:45 Plenary Session 3****Climate Change: The Way Forward for Climate Regime after Durban** Room 503 [P-3]

Prominent figures will discuss the outcomes of the United Nations Framework Convention on Climate Change (UNFCCC) 17th Conference of the Parties (COP17) in Durban and the issues beyond. Focus will be on two key issues: how to increase the ambition level of mitigation efforts to hold the global average temperature rise below 2 degrees Celsius; and how to address the issue of equity and common but differentiated responsibility and respective capability (CBDR/RC).

[Moderator]

Prof. Akio Morishima, Chair of the Board of Directors, Japan Climate Policy Center

[Keynote Speakers]

Dr. Young-Woo Park, Regional Director & Representative for Asia and the Pacific, United Nations Environment Programme, Regional Office for Asia & the Pacific (UNEP-ROAP)

Mr. Tom Athanasiou, Executive Director, EcoEquity

[Discussant]

Prof. Katsunori Suzuki, Director & Professor, Environment Preservation Center, Kanazawa University

11:00-12:30 Parallel Sessions**Domestic Climate Actions after Durban** Room 503 [S3-1]

This session gives an update on domestic climate actions in major economies and discusses how each country can contribute to collective action toward achieving the 2 degrees Celsius target. Experts from China, India, Indonesia, Japan and Germany are invited to provide their insights.

[Moderator]

Prof. Hironori Hamanaka, Chair of the Board of Directors, IGES

[Panellists]

Prof. Dr. Miranda A. Schreurs, Director of the Environmental Policy Research Institute, The Freie Universität Berlin

Prof. Yukari Takamura, Professor, Graduate School of Environmental Studies, Nagoya University

Prof. Priyadarshi Shukla, Professor, Public System Group, Indian Institute of Management, Ahmedabad, India

Prof. Rizaldi Boer, Executive Director, Centre for Climate Risk and Opportunity Management in Southeast Asia and Pacific, Bogor Agriculture University, Indonesia

Prof. Jusen Asuka, Director, Climate Change Group, IGES /
Professor, Center for Northeast Asian Studies, Tohoku University

Development of Smart Communities in Asian Cities Room 502 [S3-2]

This session introduces a smart community developed in the Higashida area of Kitakyushu City, Japan and the city's approaches in extending support to develop similar models in Surabaya, Indonesia and Putrajaya, Malaysia in cooperation with the Government of Japan. This session discusses the constraints and challenges in disseminating similar approaches in terms of legal, institutional and technical aspects with a focus on links with the national grid, and the potential of a city-to-city cooperation modality to promote these activities.

[Moderators]

Mr. Toshizo Maeda, Acting Director, Kitakyushu Urban Centre, IGES

Ms. Ikuyo Kikusawa, Policy Researcher, Kitakyushu Urban Centre, IGES

[Panellists]

Mr. Mohd. Rosli Abdullah, Senior Under Secretary, Green Technology Sector, Ministry of Energy, Green Technology and Water, Government of Malaysia

Mr. Gingin Ginanjar, Landscaping Section, Landscaping and Common Street Lighting Division, Cleanliness and Landscaping Surabaya City Council, Indonesia

Mr. Yoshinori Furukawa, Director, Smart Community Department, New Energy and Industrial Technology Development Organization (NEDO), Japan

Mr. Toshikazu Matsuoka, Chief Executive (Future City), Environment Bureau, City of Kitakyushu

Mr. Motoshi Muraoka, Partner, Senior Executive Manager, Socio & Eco Strategic Consulting Sector, NTT Data Institute of Management Consulting, Inc.

Financial Innovations for Resilience: From the Tsunami in Tohoku to Climate Change in Bangladesh and Beyond Room 411&412 [S3-3]

This session will discuss the creation and delivery of innovative financial services, such as microfinance, to build resilience to natural disasters. Lessons will be drawn from the experiences of Asian developing countries as well as Japan. Global damage caused by natural disasters continues to increase rapidly, mainly driven by climate change. The rural poor in developing countries are particularly vulnerable to such disasters. However, as the tsunami and earthquake of March 2011 in east Japan reminded us, even technologically advanced countries are vulnerable to natural disasters, and the concept of resilience is equally as important for them as it is for developing countries.

[Moderators]

Dr. Henry Scheyvens, Director, Natural Resources Management Group, IGES

Dr. Shinano Hayashi, Deputy Director, Natural Resources Management Group, IGES

[Speakers]

Dr. Mohammad Mahfuz Kabir, Senior Research Fellow, Bangladesh Institute of International and Strategic Studies (BIISS)

Dr. Somsak Boromthananat, Director, Asian Coastal Resources Institute Foundation (CORIN-Asia)

Mr. Kyosuke Inada, Deputy Head and Advisor, Office for Climate Change, Global Environment Department, Japan International Cooperation Agency (JICA)

Mr. Hiroaki Saito, CEO, iLink Inc. (Sanriku Oysters Reconstruction Project)

[Panellists]

Prof. Qian Ye, Executive Director, International Project Office, Integrated Risk Governance Project (IRGP/IHDP), Beijing Normal University

Dr. Md. Mosleh Uddin Sadeque, Interim Executive Director, Institute of Microfinance (InM)

Dr. Md. Abdul Baqui Khalily, Professor, Department of Finance, University of Dhaka

12:40-14:05 Lunch Session**IGES White Paper IV "Greening Governance in Asia-Pacific"** Room 502 [L-2]

The Fourth IGES White Paper, entitled "Greening Governance in Asia-Pacific", offers recommendations for governance arrangements and policy solutions that are critical to accelerate the transition to a green economy, as without significant reform in the region global sustainable development will remain an under-implemented ideal rather than a new reality. During this official launch contributing authors will share their research results and discuss with the audience the institutional arrangements needed for regional sustainable development.

[Moderator]

Dr. Peter King, Senior Policy Advisor, IGES Regional Centre, Bangkok

[Speakers]

Mr. Hideyuki Mori, President, IGES

Mr. Simon Olsen, Researcher, Governance and Capacity Group, IGES

Dr. Yasuhiko Hotta, Deputy Director, Sustainable Consumption and Production Group, IGES

Dr. Enrique Ibarra Gené, Policy Researcher, Natural Resources Management Group, IGES

Mr. Kazuhisa Koakutsu, Deputy Director, Market Mechanism Group, IGES

Dr. Abdessalem Rabhi, Policy Researcher, Kansai Research Centre, IGES

Mr. Toshizo Maeda, Acting Director, Kitakyushu Urban Centre, IGES

Mr. Masanori Kobayashi, Associate Professor, Yokohama National University Graduate School of Environment and Information Sciences

14:15-15:45 Plenary Session 4**Rio+20 Follow up****Room 503 [P-4]**

Rio+20 held in June 2012 has promoted discussion on sustainable development in the 21st century context, and revitalised global commitments. Outcomes on green economy, institutional framework for sustainable development, framework for action and follow-up, means of implementation have numerous implications for sustainable development governance at all levels (global, regional, national and local). This session will have a view on how sustainable development governance would be strengthened at the global level, and discuss what kind of implications such a global movement will bring to Asia and the Pacific, particularly in terms of strengthening regional governance for sustainable development, and overall economies and social development.

[Moderator]

Prof. Ryokichi Hirono, Professor Emeritus, Seikei University

[Keynote Speakers]

Mr. Rae Kwon Chung, Director, Environment and Development Division,
United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)

Prof. Nay Htun, Professor, State University of New York, Stony Brook

[Discussant]

Mr. Surendra Shrestha, Director & Focal Point for Sustainable Development Goals (SDGs) at Rio+20 Secretariat

16:00-17:30 Parallel Sessions**Future Directions for IFSD: Post Rio+20****Room 503 [S4-1]**

Several processes related to IFSD were set in motion at Rio+20, including creating a High Level Political Forum for Sustainable Development to replace the Commission on Sustainable Development (CSD), strengthening the United Nations Environment Programme, and a process to determine the functions of a High Level Representative for Future Generations. To ensure that these processes can deliver, actions at the global intergovernmental levels, is not enough, actions at regional, national and local levels are also necessary, as well as in sectors and by actors not traditionally associated with the sustainability agenda. Contributing to the idea of 'bringing the Rio+20 outcomes home', this session will emphasise implications in Asia and discuss which institutional changes are needed at regional, national and local levels, as well as how to integrate different economic sectors.

[Moderator]

Mr. Kazuhiko Takemoto, Senior Advisor to Minister of the Environment /
Senior Fellow, United Nations University Institute of Advanced Studies (UNU-IAS)

[Speakers]

Ms. Tomoko Nishimoto, Director, Division of Regional Cooperation (DRC), United Nations Environment Programme (UNEP)

Dr. Hoi-seong Jeong, President Emeritus, Korea Environmental Policy and Administration Society

Dr. Monthip Sriratana Tabucanon, Senior Adviser, Senate Commission on Natural Resources and Environment,
Office of the Parliament, Thailand

Mr. Surendra Shrestha, Director & Focal Point for Sustainable Development Goals (SDGs) at Rio+20 Secretariat

Dr. Mark Elder, Director, Governance and Capacity Group, IGES

Mr. Simon Olsen, Researcher, Governance and Capacity Group, IGES

Good Practices and Lessons Learned from Measurement, Reporting and Verification (MRV) of Mitigation Actions towards the Low Carbon Development in Asia**Room 502 [S4-2]**

MRV (Measurement, Reporting, and Verification) of greenhouse gases (GHG) is essential to establish a low-carbon society. This session will discuss options and issues related to methodological and institutional frameworks for MRV of GHG emissions as well as emissions reduction, based on good practices and lessons learned from both developed and developing countries. It will explore how to establish effective methodologies and implementing institutions in Asia in the post-2012 climate regime from technical and political aspect.

[Moderator]

Mr. Taka Hiraishi, Senior Consultant, IGES (IPCC Inventories Programme Co-chair)

[Keynote Speaker]

Mr. Rae Kwon Chung, Director, Environment and Development Division,
United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)

[Speakers]

Ms. Mayumi Ishii, CSR and Environmental Management Division, LIXIL Corporation

Dr. Pongvipa Lohsomboon, Director of Carbon Business Office, Thailand Greenhouse Gas Management Organisation (TGO)

Dr. Yasushi Ninomiya, Director, Market Mechanism Group, IGES

Mr. Kazuhisa Koakutsu, Deputy Director, Market Mechanism Group, IGES

Knowledge Management and Community of Practice for Sustainable Development**Room 411&412 [S4-3]**

The session will discuss how a community of practice can evolve and facilitate knowledge management and agenda setting for sustainable development and aim to identify key elements for the successful conduct of a community of practice. How can information and knowledge be shared and managed among a number of practitioners in promoting sustainable development? Are there any key elements for success?

[Moderator]

Dr. Daisuke Sano, Director, IGES Regional Centre, Bangkok

[Speakers]

Mr. David Galipeau, Knowledge and Innovation Management Practice Leader, UNDP Asia Pacific Regional Centre, Bangkok

Ms. Hina Lotia, Regional Coordinator, Asia, Climate & Development Knowledge Network (CDKN) /
General Manager, Programme Development Department, LEAD Pakistan

[Panellist]

Dr. Peter King, Senior Policy Advisor, IGES Regional Centre, Bangkok

17:30-17:45 Closing Session**Closing****Room 503****Awards for the Students Poster Session****Workshop****“Governance Challenges for Greening the Urban Economy: Co-Benefits and Beyond”****[Date and Time] 25 July 2012, 11:00–12:30****[Venue] UNU-IAS, 6F, International Organization Center, Pacifico Yokohama**

Cities play a crucial role in facing the challenges to create a greener economy and the institutional framework for sustainable development. This session will discuss the concept of green economy in an urban context through the lenses of two recent publications released by IGES and UNU-IAS. One is a UNU-IAS policy paper on how to create the mechanisms for moving urban areas towards a greener economy. The other is an IGES edited book on low carbon transportation in Asia.

[Moderator]

Mr. Sumihiro Kuyama, Japan Habitat Association / UN Association of Japan /
Former UN Assistant Secretary-General (Under-Secretary-General for UN Habitat)

[Speakers]

Dr. Jose A. Puppim de Oliveira, Assistant Director & Senior Research Fellow,
United Nations University Institute of Advanced Studies (UNU-IAS)

Dr. Eric Zusman, Senior Policy Researcher, Climate Change Group, IGES

[Discussant]

Prof. Darko Radovic, Professor, Keio University

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■ Kitakyushu Urban Centre

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