## The 4<sup>th</sup> Meeting of Research Coordination Committee of the Asia-Pacific Environmental Innovation Strategy Project 14-15 March 2005, NIES, Tsukuba, Japan

Organized by National Institute for Environmental Studies (NIES)

## Chairperson's Summary (Draft)

1. The 4<sup>th</sup> Meeting of Research Coordination Committee of the Asia-Pacific Environmental Innovation Strategy Project (APEIS) was held at the Ohyama Memorial Hall in National Institute for Environmental Studies (NIES) on 14-15 March 2005, Tsukuba, Japan. About 36 participants from governments, research institutes and other organizations in the Asia-Pacific region contributed to the deliberations (Participants List is attached as Appendix 1). The meeting was opened by Dr. Mikiko Kainuma, NIES, Japan, and Dr. Yoichi Goshi, Director General of NIES and Mr. Takashi Iijima, Executive Director of NIES delivered welcoming addressees. The Integrated Environment Assessment (IEA) sub-project at NIES served as the secretariat of the meeting.

2. Mr. Akio Takemoto, Ministry of the Environment, Japan made a presentation on the review and prospect of APEIS activities emphasizing that the success of APEIS will depend on the extent to which the outcome of the project is of actual use to policy-makers. In this regard, APEIS should enhance the interactions with policy-makers, international organizations and projects. Mr. Takemoto reported that APEIS has been registered as a Type 2 Partnership Initiative at the World Summit on Sustainable Development, a Portfolio of Water Actions at the Third World Water Forum as well as the Millennium Ecosystem Assessment (MA). Mr. Takemoto also reported that APEIS contribute to ECO ASIA, Group on Earth Observations (GEO), IPCC, COP(UNFCCC), UNEP's Global Environment Outlook (GEO4), GEF project on National Performance Assessment and Sub-regional Strategic Environment Framework in Greater Mekong Sub-region (SEF II), the Asia-Pacific Network for Global Change Research (APN). Mr. Takemoto also pointed out the future direction and announced that ECO-ASIA will be held on 4-5 June 2005, Gifu, Japan.

3. Each of the sub-projects of APEIS, namely Integrated Environmental Monitoring (IEM), Integrated Environmental Assessment (IEA) and Research on Innovative and Strategy Policy Options (RISPO) respectively made progress reports for Year 3.

4. Major progress highlighted by the IEM sub-project included: expansion of satellite

and ground-truth monitoring network system; monitoring of environmental disasters; monitoring of environmental degradation and formulation of environmental indices by using validated MODIS products; and establishment of ecosystem models, with which the ecosystem services, such as agricultural water use, carbon and nitrogen fixation has been evaluated. The project leaders of IEM monitoring network, Prof. Watanabe and Prof. Liu reported on their activities in related counties such as China, Australia and Singapore, respectively, and contributions to international projects, such as MA, Eco-Asia, CSD12 and Water Forum. Strengthening the ground-truth validation by close cooperation between with APEIS-Flux Network and China-Flux Network, the standardization of products among the five stations and the issue of extending the geographical coverage of the monitoring network to India and other countries were raised in the discussion. IEM expanded its activities including the third capacity building workshop in Singapore. About 40 participants from Japan, Australia, Singapore, China, Russia, India, Mongolia and Vietnam attended the workshop and 24 reports were presented addressing 3 groups: the MODIS network and its applications, APEIS-FLUX network research activities, and integration of satellite-based and ground-based systems.

5. Major progress highlighted by the IEA sub-project included: a set of integrated assessment models (second version); policy case studies using the models; advanced version of strategic database with socio-economic scenarios, complementary use of strategic database and AIM/Material model for policy analysis; innovation strategy options and environmental indicators. Other outcomes included enhanced capacity building workshop for AIM/Material development for researchers from selected Asia-Pacific countries, held at NIES, Japan; Assessment of national environmental issues such as air pollution, water and health; and linking Millennium Development Goals and national development goals with IEA tools. Applications of strategic database for analysis of renewable energy, transport sector strategies and biofuel program in Thailand; of water management model in strategic database to India, China and Thailand; and of AIM/Material model to China and other countries were demonstrated. The IEA sub-project reported that its Asia-Pacific Integrated Model (AIM) contributed to MA for quantification of global long-term scenarios of natural and social environment. In the discussion, issues of measuring institutional options was raised.

6. Major research outcomes highlighted by the RISPO sub-project included: development of the Good Practice Inventory (GPI) and making it available on the web; development of the analytical framework of Strategic Policy Options (SPOs) common to all the eight sub-themes; development of the strategies and SPOs for each sub-theme; development of SPO Database; and establishment of networks with stakeholders including policy makers in the region. Strategies and strategic policy options developed to address major challenges of the eight sub-themes were reported by the IGES researchers and the representatives of collaborating research institutes in Thailand and China. In the discussion, the importance of applying the SPOs to other countries and other areas in the next phase was highlighted. In this respect, it was noted that, collaboration with the SEF II project, and inputs into international fora such as ECO ASIA would be enhanced.

7. In the special session of Interaction with International Groups and Policy-makers, we had several interesting presentations. Dr. Penelope Canan, GCP Tsukuba Office, Japan introduced the activities of ESSP Global Carbon Project and its future plans, including the models comparison study and the coverage of underlying causes to planetary conditions. Dr. Hongwei Yang, Energy Research Institute, China, introduced the 2006 IPCC guidelines for national greenhouse gas inventories. He explained the key points considered during the revision process and stressed that the 2006 guidelines are a thorough scientific review and a structural enhancement of the IPCC inventory methodology across all source categories. Dr Rajesh Nair, NIES, Japan, introduced the activities of UNEP/GEO4 and the contents of its report, including various environmental indicators. He highlighted the fact that AIM team is contributing to the analysis of future scenarios for various Asia-Pacific regions. Prof. Priyadarshi R. Shukla, Indian Institute of Management, India, introduced the strategic program CAPaBLE sponsored by APN. He emphasized the cooperation with APEIS for capacity building workshop and networking. He also stressed that CAPaBLE is focusing on the social and developmental issues specific to the developing countries. Mr. Hideyuki Mori introduced UNEP/NISD which is closely related to RISPO II and stressed on the possibilities for future cooperation between APEIS/IEA and UNEP/NISD. For cooperation with SEFII project, Mr. Hideyuki Mori introduced the contribution of RISPO and IEA, and informed that while analysis is complete at the national level, it is going on at the regional level. For cooperation between APEIS and Millennium Ecosystem Assessment (MA), Dr. Masataka Watanabe, NIES, Japan, introduced the sub-regional assessments, the contribution of APEIS to MA, development of models for analyzing ecosystem services in Western China, and the possibilities of future cooperation.

8. Following presentations by each sub-project, participants discussed the Implementation Plan of APEIS II for Year 1, including synergies and collaboration among sub-projects and capacity building activities.

Mr. Takemoto summarized the outcomes of APEIS phase I, and suggested the direction of the next step. He summarized the outcomes of phase I as extensive and intensive research outcomes from three sub-projects, effective capacity building, expansion of partnerships in Asia-Pacific region and the world, and development of research network. He emphasized the need for further development for dissemination of outcomes from APEIS I; further development and use of regional and international networks; and consideration for a possible reorientation of APEIS objective. The discussions raised the issue of the need to further enhance dissemination of APEIS outcomes to various Asian regions; and the need of dealing with emerging issues in the next phase.

9. For Phase II, IEM plans to expand the Integrated Environmental Monitoring Network, including the MODIS data receiving system, ground truth observation stations, the data process system for higher-order products and a GIS system with the database of population, energy, water resources, natural resources, etc. IEM also tries to share the MODIS data through the internet and continues to develop the MODIS Data Exchange Network with receiving stations in APEIS-IEM member countries. IEM proposed that the environmental resources such as land productivity, regional water resources as well as carbon and nitrogen budget, will be evaluated by using the data obtained by APEIS-IEM Network. Finally, based on the evaluation of condition and trend of environmental resources, a set of policy options for sustainability in Asia-Pacific region will be proposed.

10. The IEA sub-project proposed to enhance inventory of institutional and management options in APEIS/SDB; develop country specific innovation scenarios; extend AIM/Material and other modeling tools to assess land use, material stock balance and options to achieve national development goals; enhance feedbacks from SDB to AIM/Material and other modeling tools; assess environment investment with AIM/Material; apply SDB to various sectors like energy, transportation, residential, rural electrification, water management, etc. Additionally, the IEA sub-project would further extend its capacity building and training efforts to disseminate and make IEA tools accessible to the stakeholders especially in Asia-Pacific region; and continue contributing to international activities like GEO4, IPCC, SEFII, Eco-Asia, etc.

11. The RISPO sub-project will focus on economic and political integration in East-Asia to be promoted by FTAs in the next phase. RISPO II project, titled "Integrated Policy Design on Trade, Environment and Sustainable Development in the Context of Regional Economic Integration in Asia" will be implemented in partnership with the UNEP/NISD. Two sub-groups will be set up i.e. a group on impact assessment, the other on policy. Further collaboration with IEA sub-project is expected to implement this project.

12. It was agreed that APEIS would prepare sub-project technical reports, and other outputs if required, to emphasize its contribution. Ms. Masuda will provide the revised guidelines for the same.

13. The IEA sub-project leader, Dr. Mikiko Kainuma, will act as coordinator of the RCC secretariat for APEIS II year 1 and have responsibility for organizing the work to be performed by RCC members and others on behalf of the RCC for the next 12 months.

14. Participants expressed their appreciation to the Government of Japan for their participation in the meeting as well as for their support to the APEIS project. They also expressed their thanks to the IEA sub-project for acting as Secretariat for the APEIS/RCC.

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Appendices

1. List of participants of APEIS/RCC4, 14-15 March 2005