4th High Level Seminar on

Environmentally Sustainable Cities

Under the framework of the

East Asia Summit Environment Ministers Meeting

CHAIR'S SUMMARY

The 4th High Level Seminar on Environmentally Sustainable Cities (HLS ESC), organised by the Governments of Viet Nam, Japan, Australia, Indonesia, the ASEAN Working Group on Environmentally Sustainable Cities (AWGESC) and ASEAN Secretariat, was held in Hanoi, Viet Nam on 21 - 22 March 2013. The Seminar was chaired by Dr. Bui Cach Tuyen (Deputy Minister, Ministry of Natural Recourses and Environment, Government of Viet Nam) and co-chaired by Dr. Ryutaro Yatsu (Vice Minister for Global Environment Affairs, Ministry of the Environment, Government of Japan), Mr. Bruce Edwards (Assistant Secretary, Environment Quality Division, Department of Sustainability, Environment, Water, Population and Communities, Government of Australia) and Ms. Masnellyarti Hilman (Chairperson, AWGESC; Deputy Minister for Hazardous Substances, Hazardous Wastes and Solid Waste Management, Government of Indonesia).

The Seminar brought together about 200 participants consisting of representatives from 15 national governments, 21 local authorities and 29 international organisations, NGOs, research institutes, private companies and others for information exchange, knowledge sharing and frank discussion on the agenda of environmentally sustainable city development through Plenary and Thematic Sessions (Appendix A and B).

The Seminar recalled the main outputs of the previous HLS ESC and the progress made as follows:

- The 1st HLS ESC (2–4 March 2010, Jakarta, Indonesia) recommended the following activities as practical means for promoting ESC development in the region:
 - i. An East Asian 'Model Cities' Initiative;
 - ii. A clearinghouse for ESC-related data and information;
 - iii. A Public and Private Sector Forum on ESC;
 - iv. ESC Capacity Building Programme;
 - v. EAS ESC Awards based on performance indicators.

- The 2nd HLS ESC (5–6 March 2011, Kitakyushu, Japan) welcomed the implementation of the proposed ASEAN ESC Model Cities Programme, which was developed to follow up on the five recommended activities from the 1st HLS ESC. The programme was approved and commenced implementation a month later.
- The 3rd HLS ESC (6 8 March 2012, Siem Reap, Cambodia) reviewed the progress made in ESC across the region, showcased the achievements of Year 1 of the ASEAN ESC Model Cities Programme and warmly supported the continuation of the programme into its second year of implementation.

The Seminar adopted this Chair's Summary as a record of the discussion and outcomes.

1) In the Opening Session:

- a) Dr. Bui Cach Tuyen (Deputy Minister, Ministry of Natural Recourses and Environment, Government of Viet Nam) welcomed participants to the 4th HLS ESC, congratulating East Asia Summit (EAS) participating countries for their efforts which have yielded tangible actions and outputs within five years of the Environment Ministers Meeting's inauguration. He also shared Viet Nam's recent developments on ESC policy and legal frameworks, such as the Law on Urban Planning 2009, National Strategy on Green Growth and Master Plan for development of urban systems in Viet Nam by 2025, as well as vision towards 2050. The Ministry of the Environment and Natural Resources is formulating national ESC criteria and has selected Da Nang and Cao Lanh as pilot cities under the ASEAN ESC Model Cities Programme.
- b) Dr. Ryutaro Yatsu (Vice Minister for Global Environment Affairs, Ministry of the Environment, Government of Japan) re-affirmed Japan's commitment to ESC and noted that Japan's support to the 4th HLS ESC is among various initiatives celebrating the milestone 40th Year of ASEAN-Japan Friendship and Cooperation. He highlighted Japan's capacity and plans on disseminating advanced environmental technologies and solutions in 3R, environmentally sustainable transport (EST), water, climate change adaptation and mitigation, including to selected cities under the ASEAN ESC Model Cities Programme. He encouraged cities and other stakeholders to strengthen cooperation and also develop partnerships between local governments (such as sister cities) as well as between the private sector and research institutes, in order to introduce best available technologies for sustainable city development.
- c) H.E. David L. Carden (Ambassador, US Mission to ASEAN) announced the CityLinks Pilot Partnership between US and ASEAN Member States, an 18-month technical exchange programme aimed at improving climate adaptation readiness in ASEAN cities. Ambassador Carden noted that sustainable cities planning presents a strategic opportunity to take an

integrated cross-sectoral approach to actively include infrastructure, health, social services, energy, transportation and education. This approach is not new. It was conceived and adopted early in the 20th century in Daniel Burnham's <u>Plan of Chicago</u> (Burnham, Daniel. Plan of Chicago. Chicago: The Great Books Foundation, 2009) and remains relevant today.

d) Prof. Shuzo Murakami (Chief Executive, Institute for Building Environment and Energy Conservation (IBEC), Japan) delivered a keynote presentation on 'Promotion of Environmentally-Sustainable Cities in Japan and Assessment of City Performance by CASBEE-City'. He outlined the growing importance of local governments in creating low carbon societies as well as fostering green growth and innovation. Japan's "Eco-Model Cities" and "Green FutureCities" incentivise local governments to pursue and sustain initiatives without reliance on the central government. Some 30 Japanese cities have demonstrated good practices and innovative strategies contributing to the 'Triple Bottom Lines' of environment, society and economy, as well as creating new values in terms of post-disaster restoration. Relatedly, the CASBEE system helps guide city planning and evaluate city performance in these aspects. Japanese cities such as Yokohama and Kitakyushu are actively contributing towards creating low carbon cities in Asia by providing advanced technologies, technical assistance, capacity development and dissemination of best practices.

2) From Plenary Session 1 'ASEAN ESC Model Cities Programme: Lessons Learnt and Way Forward' (Appendix D), the Seminar noted the following:

- a) ASEAN Member States with existing national ESC frameworks and indicators and other initiatives like city awards programmes, are strongly encouraged to enhance these towards creating a sustainable national platform for enabling knowledge exchange and inter-city cooperation at the country level.
- b) The Model Cities Programme Year 1 was implemented from April. 2011 March 2012, and Year 2 is planned to commence in 2013. It expects to extend support to an additional number of local governments, as well as scale up efforts in knowledge management, matching cities for twinning arrangements and partnership building with supporting organisations.
- c) The priority capacity building and assistance sectors for ASEAN cities are solid waste management, wastewater treatment and sanitation, air quality management, urban greenery as well as low carbon cities and climate change adaptation.
- d) A regional initiative like the Model Cities Progamme is perceived as an umbrella instrument and inclusive platform to gather key stakeholders for supporting the 'ASEAN Initiative of ESC"

implemented by the AWGESC to promote collaborative actions, knowledge exchange, raising public awareness, replicate best practices and recognise the excellence of outstanding local governments.

- e) ASEAN Member States highlighted the following national initiatives to promote ESC and progress made respectively:
 - i. Cambodia's Clean City Program aims to promote clean cities in Cambodia through dissemination of ESC indicators, a Clean City Award programme and a National Action for Plastic Bag Reduction. Indicators have been improved through the translation of the ASEAN ESC indicators and ongoing work to implement the indicators to assess environmental department performance.
 - ii. Indonesia's Adipura Award scheme has been created to incentivise cities to improve environmental management focused on four indicators – solid waste management, green open space management, water pollution control and air pollution control. Secondly, waste banks have been established where people are paid to deposit their waste which is then used to make handicrafts, as well as raw materials for recycling industries.
 - iii. Lao PDR decided in 2011 to transfer full responsibilities in urban administration and service delivery to local authorities in addition to formulating national ESC Guidelines with JICA's support. These are viewed as vital policy tools in establishing a strong local network and increasing external resource support to achieve much demanded green urban services.
 - iv. Malaysia's Sustainable Cities-Environment Award (Anugerah Alam Sekitar Bandar Lestari) gave recognition to local authorities and urban centres for their overall commitment and efforts towards environmental sustainability. Malaysia nominated City of Kuching North who won the Sustainable Cities-Environment Award in 2006/2007 and 2009/2010 to participate in the ASEAN ESC Model Cities Programme Year 1 as an incentive to the city, and to motivate more cities to participate in the Sustainable Cities-Environment Award.
 - v. Myanmar's national development agenda recognises the importance of sustainable urban development and an increasing number of initiatives are being developed to assist Nay Pyi Taw, Yangon, Mandalay and other key cities to increase technical and human capacity as well as raise awareness on ESC.
 - vi. Thailand's National Economic and Social Development Plan and Environmental Quality Management plan (2012 – 2016), based on His Majesty the King's philosophy of Sufficiency Economy, underline the national policy framework and directions for ESC development. The Ministry of Natural Resources and Environment has developed some guidelines and criteria on urban greenery management and

introduced awards to recognise excellence in local government administration.

- vii. Philippines' suite of initiatives under the ECO-friendly and Healthy Cities framework, has been expanded with new programmes such as the e-Course on Solid Waste Management for LGUs (eSWM4LGUs). A roadmap envisions the selection of 'Model' Cities covering all major island groups and regions who will be assisted by regular national activities. Enhanced partnership with Philippine local government units Environment and Natural Resources Officer and League of Cities will help expand adoption of the ESC platform by local government units in the country.
- viii. Viet Nam's National ESC programme is aimed at formulating nationally appropriate ESC approach, enhancing awareness of ESC development and developing appropriate legal frameworks. Recent progress has been made on reviewing the existing legal frameworks, researching and specifying the concept of ESC in Viet Nam as well as drafting the initial 24 criteria.

3) In Plenary Session 2 'ESC Promotion in Other Countries' (Appendix E), the Seminar:

- a) Noted and appreciated the national initiatives of EAS participating countries for furthering ESC development and their relevance to the ASEAN ESC Model Cities Programme. In summary, these were:
 - i. Australia's sustainable population strategy, Sustainable Australia Sustainable Communities, introduced in 2011, aims to ensure that future population change is compatible with the economic, environmental and social wellbeing of Australia. This includes a blueprint for creating a nation of sustainable communities which have the services, job and education opportunities, affordable housing, amenity and natural environment that make them places where people want to work, live and build a future.
 - ii. China's set of initiatives comprise the Environmental Protection Target and Responsibility System, Urban Air Quality Reporting System, Quantitative Examination on Integrated Treatment of Urban Environment (QEITUE), National Model City for Environmental Protection (NMCEP) and Pilot City for the Construction of Ecological Civilization (NPCCEC) etc. These have helped cities to significantly improve environmental quality and liveability, improve local government capacity and attract investments for green developments.
 - iii. Japan's Joint Credit Mechanism (JCM) will be used for providing a package of support for technology transfer, action plan and legislation, capacity building to partner cities to create ESC. One of the objectives of the JCM is to utilise Japanese advanced low carbon technology and the reductions in emissions could then be credited to Japan. Examples of packaged support in three sectors – waste

management, water management and energy conservation - were illustrated.

- iv. Republic of Korea's initiative through the Jirisan National Park the largest national park in Korea – has actively pursued cooperation with the City of Gurye to protect biodiversity and pursue sustainable local development. Reforms have taken place to ensure that the voices of the local community are heard through stakeholder meetings and signing Memorandums of Understanding between relevant bodies.
- United States through USAID focuses on sustainable urban development through ٧. capacity building, service delivery, and partnerships, including with the private sector. USAID has recently released a draft Agency policy to support sustainable urban development emphasising the sustainable provision of services to rapidly urbanising cities, including in Asia. This draft policy is available online for comments until 26 March 2013. Key regional USAID initiatives include Mekong - Building Resilience in Asian Cities to Climate Change (M-BRACE) and the Asia-Pacific Adaptation Project Preparation Facility (ADAPT Asia-Pacific) which is focused on accelerating access to climate adaptation financing. In addition, the upcoming CityLinks Pilot Partnership between the US and ASEAN Member States will link US and ASEAN cities on technical exchanges, planning, and project implementation through peer-to-peer learning. Finally, USAID is in the process of identifying opportunities for science and technology to accelerate sustainable urban development, through spatial analysis, mobile technology, and other approaches, and is planning an Urban Adaptation Futures Conference that will bring together city practitioners, scientists, and the private sector.
- 4) In Thematic Session 1 'Local ESC Initiatives and Related Activities' (Appendix F), the Seminar organised three parallel sessions which concluded with the following key messages:
 - a) Thematic Session 1A ('Solid Waste Management', chaired by Dr. Mushtaq Memon, Programme Officer, UNEP-IETC and co-chaired by Mr. Kazunobu Onogawa, Senior Fellow, IGES and former UNCRD Director)
 - i. In pursuing the 3R and solid waste management, national and local governments are recommended to embrace holistic approaches which also aim at generating cobenefits from reducing greenhouse gas emissions to address climate change.
 - ii. Greater efforts are required to promote the paradigm shift of SWM activities from the traditional spheres of public health and cleanliness to the wider perspective of augmenting environmental resources and the creation of sound material cycles.
 - iii. An inter-linked approach is required leading to harmonise policies and actions among different sectors such as waste, water and air to improve quality of life and

environment in cities.

iv. Multi-stakeholder partnerships are key to promote integrated solid waste management (ISWM) based on 3R at city/municipality level to support a holistic approach for improved efficiency and efficacy of waste management services across different waste types, including biomass, non-hazardous waste, hazardous waste, Ewaste, and construction and disaster waste.

b) Thematic Session 1B ('Urban Water and Sanitation', chaired by Dr. Minh Nguyen, Senior Research Scientist, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia)

- i. Promote the application of Integrated Urban Water Management principles into practices as an effective way for ESC. For cities in developing countries, more focus should be on sanitation issues, and more knowledge on climate change impacts should be generated for planning adaptation solutions.
- ii. Conduct capacity building with strong relationship development through upfront engagement, partnership, knowledge & skill transfer, and shared ownership. This will foster trust, leading to commitment and active involvement, and thus support of the local community and local stakeholders, facilitating effective implementation of policies and practices for urban sustainable development.
- Promote knowledge exchange within or across the region, foster innovation and collaborative learning; such as through a regional inter-governmental working group responsible for urban water, waste and environmental sanitation management. Regular communication is essential.

c) Thematic Session 1C ('Co-benefits in Clean Air Planning', chaired by Ms. May Ajero, Air Quality Program Manager, Clean Air Asia and co-chaired by Mr. Roland Haas, Programme Director, German International Cooperation (GIZ))

- i. Through the co-benefits approach, cities will be better able to link environmental measures (especially for air pollution) and plans with climate change mitigation and thus can more easily reduce the overall costs of dealing with both issues.
- ii. Application of a co-benefits approach can also lead to faster adoption of GHG mitigation measures, resulting in earlier reductions in both GHG and air pollutant emissions.
- iii. There is a wide range of opportunities and tools available for the cities to adopt cobenefits approach as a means to achieve environmental sustainability.
- iv. Co-benefits of low-carbon initiatives are maximised when linked with city vision and

goals for transport, waste, housing and energy, as well as job creation and economic development.

- v. Stakeholder participation is important. Citizens, private sector, development agencies and other international organisations can play important roles to support cities to better integrate environment plans, clean air plans and low carbon plans.
- 5) In Thematic Session 2 'ESC Policies and Related Activities' (Appendix G), the Seminar organised three parallel sessions which concluded with the following key messages:
 - a) Thematic 2A ('Policy and Legal Reform', chaired by Dr. Donovan Storey, Chief of Section, Environment and Development Division, United Nations Economic and Social Comission for Asia and the Pacific (ESCAP))
 - i. Policy frameworks need to be adapted to changing circumstances, needs and capacities over time.
 - ii. Good policy is based upon dialogue, cooperation, and transparency between government, citizens, and business sectors.
 - iii. Policy and legal reform should go alongside with information and the sharing of a long-term vision of a broad framework and integrated development strategy.
 - iv. Political and legal reform needs to go hand-in-hand with strategies of implementation, such as action plans.
 - v. Good initiatives can come from the outside, but they must reflect local circumstances, capacities, and values.
 - vi. Political will and commitment provides a necessary pre-condition for policy and legal reform, but ultimately success depends upon all stakeholders.
 - b) Thematic Session 2B ('Urban Adaptation and Resilience', chaired by Dr. Teresa Leonardo, Regional Science & Technology Advisor, Regional Development for Asia, USAID)
 - i. As ASEAN cities continue to face the severe and adverse consequences of dramatic changes in climate patterns, the integration of urban resilience into urban planning and operations is increasingly critical. Achieving sustainability requires an integrated systems-based and cross-sectoral approach in information sharing, coordination, and decision-making to address socio-economic and environmental challenges.
 - ii. An effective urban resilience system requires the best use of science & technology to understand the magnitude, distribution, and uncertainty of risks over space and time, as well as the potential costs of not mitigating these risks, to inform the application of appropriate policies and actions.

- iii. Active participation from relevant stakeholders must be fostered to formulate actionable, appropriate, and robust policies. Community engagement and strong participatory systems for implementation, monitoring, and enforcement of policies are an important foundation for strengthening urban resilience.
- iv. There are opportunities to institutionalise and scale up lessons from urban resilience experiences, by integration of best practices into provincial and national policies, as illustrated by the creation of two national laws in the Philippines based on the leadership of Albay Province, Philippines in disaster risk reduction and urban adaptation.
- v. There are financial and capacity challenges in building resilient urban systems. There is a need for activities and networks to help cities access climate financing. Accelerating urban adaptation also requires identifying opportunities to work collaboratively with the private sector in building economically and environmentally resilient cities.
- vi. Peer-to-peer partnerships, training activities, and knowledge sharing events that bring together experienced professionals to share best practices and innovative solutions are needed to help ASEAN meet its sustainability goals and address the challenges faced by its cities today and in the future.

c) Thematic 2C ('Low Carbon Societies', chaired by Dr. Junichi Fujino, National Institute for Environmental Studies (NIES) Japan and co-chaired by Dr. Kazuhisa Koakutsu, Director, Market Mechanism, Institute for Global Environmental Strategies (IGES))

- i. Enhancing ESC concepts and frameworks to encompass sustainable low-carbon society is a region-wide concern. While cities have differing priorities, challenges and know-how, a common methodology is required to help local governments plan and act to develop environmentally sustainable low carbon cities.
- ii. Such a methodology would employ appropriate modelling tools and quantitative data to develop comprehensive low carbon societies' scenarios, draw roadmaps as well as to inform policy design. Existing initiatives by WRI, ICLEI, C40, World Bank, UN-HABITAT, UNEP and NIES/AIM to provide international GHG accounting protocols for national and local governments to quantify greenhouse gas emissions in a wide range of sectors and measure the impacts of mitigation initiatives, which will be critical for designing feasible and robust policy roadmaps and carbon credit trading mechanisms to accelerate global mitigation efforts.
- iii. Expanding interaction, collaboration and knowledge sharing between local governments, international organisations (such as the Green Cities Programme of the Organisation for Economic Co-operation and Development (OECD)), private

companies, research institutes, NPO/NGOs and the public are essential. The Low Carbon Asia Research Network (LoCARNet), aims to facilitate the informed decisionmaking process by sharing proven scientific knowledge and increasing interdisciplinary and cross-sectoral research capacity in the region, in the scheme of not only north-south cooperation, but also south-south regional cooperation. LoCARNet will be one of the key platforms to provide common foundation among different stakeholders to seek the pathways collaboratively to achieve self-reliant low carbon development in the region.

5) In Plenary 3 'Reporting Back by Session Chairs', the Seminar noted:

- a) Cities of developing Asia enjoy the 'latecomer's advantage' and are continuing to lead the way in ESC development through innovative city- and citizen-led local initiatives;
- b) Supporting actors such as the national governments, financing institutions, development agencies, private sector, NGOs and universities could enhance local actions by providing assistance that is respectful of local needs and contexts;
- c) Robust knowledge management, sustainability indicators and effective coordination will be required to accelerate positive transformation, measure progress and 'connect the dots' for "win-win' outcomes for all stakeholders.

6) In Plenary 4 'Roundtable on Future Activities on ESC', the Seminar noted:

- a) Ms. Lauren N. Sorkin (Environment and Climate Change Specialist, Viet Nam Resident Mission, Asian Development Bank (ADB)) introduced ADB's Green Cities Initiative which aims to define policies and design programmes that support implementation of green city action plans for sustainable green growth. ADB adopts a 3E's approach to urban planning and investment covering Environment, Economics and Equity to develop Green, Competitive and Inclusive cities. ADB has developed tools and guidelines for the 3E approach and plans to work with cities that commit to a long-term partnership (15–20 years). ADB's Green cities operations are expected to grow significantly from 2015, with upcoming initiatives proposed to provide technical assistance to two Vietnamese cities and scoping studies for developing Green Action Plans in Melaka (Malaysia) and Songkhla (Thailand).
- b) Dr. Donovan Storey (Chief, Environment and Development Division, ESCAP) outlined ESCAP's current work and future initiatives in urban development. He highlighted ESCAP's work in solid waste management, alternative and pro-poor building materials, several projects

related to building resilient cities, especially with regard to the impacts of climate change, as well as urban infrastructure and water management. ESCAP had also recently concluded a project on urban management and planning in Central Asian countries, and continued to assist its members through policy documentation and technical expertise. Dr Storey also announced two substantive forthcoming publications, the 'Quick Guide for Policy Makers on Pro-Poor Climate Change and Disaster Risk Reduction' and the second edition of 'The State of Asia-Pacific Cities Report', which will be launched in 2014. As a regional commission of the United Nations, ESCAP is also working with member States on implementation of the outcomes of the Rio+20 conference, and preparations for the sixth Asia-Pacific Urban Forum, to be held in 2015, and HABITAT III, in 2016..

- c) Mr. Choudhury Rudra Charan Mohanty (Environment Programme Coordinator, United Nations Centre for Regional Development (UNCRD)) shared the main outcomes of the recently concluded 4th Regional 3R Forum in Asia, which is the 'Hanoi 3R Declaration Sustainable 3R Goals for Asia and the Pacific for 2013 2023'. To support the goals adopted by the Declaration, local governments are called to integrate resource efficiency in urban development policy and strategy (energy, transport, water, industry), implement innovative financing for resource efficient infrastructure (eco-towns, eco-industrial parks, R&D facilities, etc. and realise PPPs, awareness programs for citizens as well green procurement. He also introduced the activities of UNCRD's initiatives on Environmentally Sustainable Transport (EST), Reduce, Reuse Recycle (3Rs) and International Partnership for Expanding Waste Management Services in Local Authorities (IPLA).
- d) Dr. Tadashi Matsumoto (Senior Policy Analyst, Regional Policies for Sustainable Development Division, OECD) shared OECD's findings from its Green Cities Programme, which highlighted the importance of national price signals and standards, aligning local and national green growth objectives and harmonising monitoring tools. He also introduced several ongoing OECD activities. The OECD National Urban Policy Reviews share OECD countries' solutions and policy experience on national urban policies. Considerable challenges remain in terms of data and the OECD is filling this gap through their OECD Metropolitan Database which defines the OECD metropolitan areas in an internationally comparable manner (http://measuringurban.oecd.org). Finally, the forthcoming project on Green Growth in Fast Growing Asian Cities will analyse the urban green growth policies in 4 6 fast-growing Asian cities. The project will be organising innovative knowledge sharing exercises including city to city peer reviews and two forthcoming forums in Stockholm (23rd May 2013) and Kitakyushu (20th October 2013).
- e) Mr. Naoki Mori (Japan International Cooperation Agency (JICA) Expert, Climate Change

Programme Advisor, Support Program to Respond Climate Change, MONRE, Viet Nam) explained that JICA provides comprehensive support for ESC through ODA from upstream, i.e. master planning to downstream, i.e. project finance. JICA also promotes "city to city cooperation" between developing countries and Japan, through direct financial support to the city. Finally, JICA has a new project for capacity development on climate change/low carbon development in South-East Asia by establishing 'Climate Change International Training Center' in Thailand.

- f) Mr. Roland Haas (Director of the Programme 'Cities, Environment and Transport in the ASEAN Region') GIZ presented three of GIZ's ESC-relevant activities on behalf of the German Government in South East Asia. NEXUS has the objective of improving city capacities for an integrated urban resource management covering the nexus of water, energy and food. The City Development Initiative for Asia (CDIA) focuses on providing assistance on infrastructure programming and prioritisation, pre-feasibility studies, identification of financial sources for selected investments and city level capacity development. Future activities are lined up for the projects: Clean Air for Smaller Cities (8 countries), Sustainable Port Development (7 countries) Energy Efficiency and Climate Change Mitigation in the Transport Sector (5 Countries).
- g) Dr. Montira Pongsiri (Science Advisor, U.S. Mission to ASEAN) reinforced the need to share and apply the best science and technology to improve understanding of climate related risks over space and time, design innovative approaches to build resilience and inform vulnerable communities and to inform planning, resource targeting and implementation of adaptation actions. There is strong demand to develop user-tailored science-based tools and guidance to inform decision-makers. She also elaborated on the objectives of the CityLinks Pilot Partnership between the US and ASEAN Member States to support urban adaptation and resilience planning and implementation in Southeast Asian cities.
- h) Prof. Shuzo Murakami (Chief Executive, IBEC, Japan), the seminar's keynote speaker, reiterated the outcomes of the Eco-Model City and Green FutureCity Programmes in Japan both of which he chairs the selection panel that successfully brought about voluntary local actions and efforts toward development of low-carbon cities as well as environmentally, socially and economically sustainable cities, respectively. He also introduced a plan to extend such findings and knowledge to other Asian countries by citing successful inter-city cooperation projects implemented by Kitakyushu City for many years.

7) The Seminar therefore:

- a) Acknowledged that achieving urban sustainability requires the implementation of supporting policies, effective enforcement of environmental laws, as well as capacity building in parallel with adopting appropriate technological solutions. Besides that, the leadership of municipal and local governments, as well as action and support of local communities through individuals, groups, businesses and industries, are also equally critical to make such policies and practices effective;
- b) Reaffirmed that effective sustainability policy development and implementation must integrate the three pillars of sustainability, namely social, economic and environmental considerations;
- c) Recognised that ASEAN cities continue to face severe and adverse consequences of dramatic changes in climate patterns. There is an urgent need to strengthen the resilience of cities to disasters and climate change impacts, including addressing the particular needs and concerns of vulnerable and poorer populations;
- d) **Recognised** the importance of applying science and technology, and encouraged:
 - i. Cooperating with and strengthening regional networks to share proven and userfriendly science and technology-based decision-making tools and policy guidance, and effective approaches to climate adaptation and building resilience. Strong regional platforms can enable cooperative implementation of joint regional strategies, facilitate city-to-city earning and cross-sectoral information sharing, and accelerate innovation;
 - ii. **Applying** the best available science and technology to assess risks, and inform planning, implementation and monitoring of climate adaptation and urban resilience actions, such as use of spatial data analysis to inform zoning and other urban planning decisions, as well as encouraging data sharing between institutions and engaging the science community to better target models and analysis for local needs.

e) Recommended EAS Environment Ministers to consider the following actions:

- Continue implementing actions agreed under the Singapore Declaration on Climate Change, Energy and Environment and also the outcomes of the United Nations Conference on Sustainable Development ('Rio +20') and facilitate initiatives linked to the implementation of regionally relevant programmes with practical outcomes;
- ii. On broad development paradigms, policies and legal frameworks:
 - Avoid the past development experiences where environmental degradation accompanied economic growth – by pursuing the 'leapfrog' approach and decoupling of economic development and negative impacts on the

environment;

- Mainstream and develop eco-efficient and low carbon national and local action plans into development policies and plans which are inclusive of environmental, economic and social dimensions, while also strengthening enforcement and compliance of legal frameworks;
- Integrate resilience into cross-sectoral urban planning operations to sustainably address environmental and socio-economic challenges;
- Facilitate the introduction, diffusion and scale-up of transformative and best available technologies, including removing policy barriers, in key sectors such as energy (energy efficiency, renewable energies and smart grids), green lighting and buildings, transport, waste management, water supply and wastewater management, aiming at maximising the co-benefits for addressing local environmental issues while mitigating and adapting to climate change;

iii. On practical actions under EAS collaboration on ESC:

- Continue to foster linkages and cooperation among initiatives by EAS participating countries, noting the success of the 4th HLS ESC as a multistakeholder platform for advancing work of the environmental stream of EAS through regional collaboration on ESC;
- **Strengthen** collaboration with other stakeholders such as the private sector, financing institutions, research organisations, universities and NGOs.
- Welcome and collaborate with international/regional/national local government associations, which play an important role to expand the lessons and experiences of model cities through multi-cities programmes, framework and tools for local governments.
- Recommend EAS Senior Officials to work inter-sessionally to review and develop new programmes that promote capacity-building, peer-to-peer partnerships, knowledge exchange on best practices and innovative solutions

 both within countries and across the region – to help ASEAN Member States meet its sustainability goals and address the present and future challenges faced by its cities;
- f) Requested the Secretariat (IGES and/or ASEAN Secretariat as appropriate) to communicate to and report the Chair's Summary of the 4th HLS ESC and consult relevant stakeholders on possible ways forward at the following upcoming meetings:
 - i. 11th Meeting of the ASEAN Working Group on Environmentally Sustainable Cities (AWGESC) to be held tentatively on 11-13 June 2013 in Singapore;

- ii. 24th Meeting of the ASEAN Senior Officials on the Environment (ASOEN) which is planned to be held in September 2013 in Indonesia;
- 12th ASEAN Plus Three Environment Ministerial Meeting to be held tentatively in October 2013 in Indonesia;
- iv. The forthcoming 4th EAS Environment Ministers Meeting;
- Other relevant major meetings and seminars pertaining to ESC, including those under the framework of Rio+20, 2015 Millennium Development Goals (MDGs), new post-MDG sustainable development goals and HABITAT III.

APPENDICES

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- Appendix B Programme
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- Appendix D Summary of Plenary Session 1
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- Appendix F Summary of Thematic Sessions 1A, 1B and 1C
- Appendix G Summary of Thematic Sessions 2A, 2B and 2C