

AWGESC

REGIONAL FRAMEWORKS AND INTER-CITY NETWORKS

High Level Seminar on Environmentally Sustainable Cities
Jakarta 2 – 3 March 2010

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ASEAN Working Group on Environmentally Sustainable Cities

- Established in 2002
- The primary concern is urban environmental management. The focus is on improving the quality of the living environment in the cities that is sustainable.
- Focusing on clean land, clean water and clean air. Green and blue issues will be included in the future.
- Programs:
 - Established indicators for Clean Air, Clean Land and Clean Water
 - ASEAN Environmental Sustainable Cities (ESC) Award
 - Sharing information through City to City Network
 - Singapore Index on Cities' Biodiversity (proposal)
 - Cool ASEAN, Green Capitals Initiative

Several Major Problems in Cities

- **Rapid Urbanization** – As more and more people leave villages and farms to live in cities, urban growth results. The rapid growth of cities is happening all over the world, including in the East Asian Regions. 65% of population living in urban areas, how can cities develop without destroying the environment
- **Waste** - Improper management of solid waste is one of the main causes of environmental pollution and degradation in many cities, especially in developing countries.

Several Major Problems in Cities

- **Energy Use** - Despite only representing 2 percent of the world's surface area, they are responsible for 75 percent of the world's energy consumption.
- **Air Pollution** - The World Health Organization states that 2.4 million people die each year from causes directly attributable to air pollution, higher level of pollutants found in cities Air pollution is usually concentrated in densely populated metropolitan areas, especially in developing countries where environmental regulations are relatively lax or nonexistent.

Several Major Problems in Cities

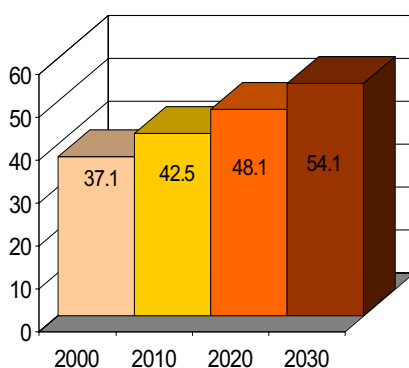
- **Transportation** – The needs for transportation within a city also comes with significant undesirable side effects, particularly in terms of air pollution in urban areas, congestion and emissions of greenhouse gases, which can impact global climate change.
- **Climate Change** - Cities bear a large responsibility for causing climate change and are therefore key to alleviating climate change. But at the same time, cities are also being subject to the impacts of climate change

Challenge for Cities

- Cities are the motor of growth for economic development but also at the same time cities also have a lot of environmental problems with little or no environmental control. Cities are now entering a new thinking approach and in a great position to lead the way for others to follow.

Urbanization in Asia

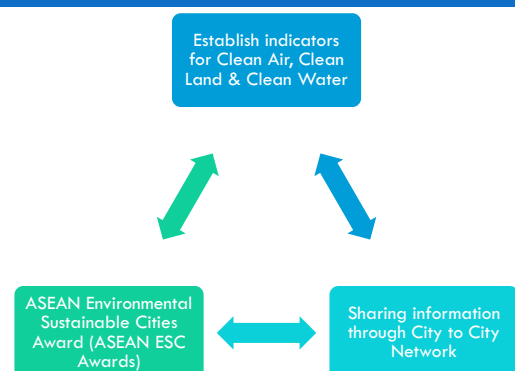
Percentage of Urban Population in Asia



- More than two-thirds of the world's poor live in Asia; more than 650 million people live on one dollar-a-day or less.
- Asia is home to two-third's of the world's slum population.

Source: UN World Urbanization Prospects: The 2007 Revision

ASEAN Working Group on Environmentally Sustainable Cities – Primary Activities



Use of Key Indicators

- Valuation of clean air indicators
- Valuation of clean water indicators
- Valuation of clean and green indicators

Simplicity,
Applicability,
Scientific
Reliability

Performance score technique

Grading technique for city achievement

Clean Air Indicators

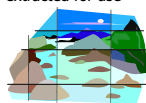
No	Objectives	Environmental Indicators	
		Output & Performance	Environmental Quality
1	To ensure availability and quality of air quality data		Number of days in a year that SO₂, NO₂, PM₁₀ levels exceed WHO/USEPA air quality standards
2	To reduce air emissions from mobile sources	% vehicles that meet city/national standards during roadside inspection	Number of days in a year that Pollutant Standards Index (PSI) exceeded 100 ('unhealthy')
3	To reduce air emissions from land-based sources	% industries that fulfill the requirement of national standards	
4	To increase energy efficiency and the use of cleaner fuels	% of alternative fuels used	

USEPA Standard



Clean Water Indicators

No	Objectives	Environmental Indicators	
		Output & Performance	Environmental Quality
1	To achieve good accessibility and quality of water supply	% households with access to potable water infrastructure % households with tap water that meets WHO drinking water standard	Annual average levels of pH, DO, TSS, BOD, and <i>faecal coliform</i>. (At least 4 parameters to be reported. For Thailand, TSS is not included)
2	To protect water resources, safeguard ecosystems and public health	% households and industries linked to sewerage system or equivalent where discharge meets national standards	
3	To move towards sustainable supply & use of water	% Capacity of city in supplying water to meet average consumption	
4	To inculcate environmental responsibility and ownership	% school at all levels with water conservation education programs	



Clean and Green Land Indicators

No	Objectives	Environmental Indicators	
		Output & Performance	Environmental Quality
1	To ensure the effective storage, segregation and collection of wastes	Freq of cleaning of streets & public areas % waste at source that is stored in dedicated hold areas/receptacles before being disposed promptly % waste collected from door to door/collection point % waste transported in covered vehicles on a daily basis % recyclable (3R) waste segregated at source	% reduction in total waste generated a year

removed

Overall recycling rate

Compliance to the spatial planning Green area



Mechanism and Implementation of ASEAN ESC Award

The mechanism encompasses types of awards, nomination process and review process.



Type of awards

Types of awards can be provided based on possible selected category comprising clean air, clean water and clean land.



Nomination and review processes

Nomination and review processes are divided into four phases as follows:

PHASE 1 (1st year)

Each member country can nominate the city to be awarded. In this phase, self review by nominating country is applied. The review is done using each country's criteria and indicator.



PHASE 2 (2nd year)

Each member country can nominate three cities based on single category which is selected by the city. In this phase, self review by nominating country is also applied. The award could be given for the cities which achieve at least "good performance" on the single category they selected.

PHASE 3 (3rd year)

Each member country proposed the award based on whole category comprising clean air, clean water, and clean land in which the city is supposed to achieve "good or excellent performance" for two categories, while performance of the third category has to be at least "moderate".

PHASE 4 (5th year)

In addition to using the three mentioned categories (whole category) as in the phase 3, the city should use holistic approach incorporating as well the following components:

- ✓ Air quality and management
- ✓ Water quality and management
- ✓ Land quality and management
- ✓ Health and sanitation
- ✓ Good governance which consists of:
 - ✓ Institutional mechanism, Monitoring/enforcement and mechanism of public petition/complaint address, financial mechanism, stakeholder/Public participation/Awareness activities
- ✓ Education and awareness

The Singapore Index on Cities Biodiversity

- The Singapore Index on Cities Biodiversity - AWGESC agreed to take a step-by-step approach in considering the adoption of the Singapore Index as key indicators for Clean Land.
- Biodiversity is important for sustaining human health and yet, the rate of biodiversity loss is occurring at an unprecedented pace.
- The biodiversity component forms a small part of most of the environmental indices. These indices only apply to countries no cities
- Hence, for cities to better evaluate their biodiversity conservation efforts, it was proposed than an evaluation tool be developed

ASEAN Mechanism for Climate Change at Local Level

ASEAN WG on Environmentally Sustainable Cities (2002)

Builds upon the ASEAN Vision 2020: "A clean and green ASEAN with fully established mechanisms for sustainable development to ensure the protection of the region's environment, the sustainability of its natural resources, and the high quality of life of its peoples."

Ad-hoc WG on Climate Change (2009)

- Established in line with ASEAN Declaration on Environmental Sustainability to further develop ASEAN Climate Change Initiative

Support for on Sustainable Cities from Partner Organizations

- GTZ – Clean Air for Smaller Cities Project, Assisting cities to improve air quality through the establishment of a clean air plan. Cities in ASEAN region that participate in the project; Chiang Mai, Korat, Vientiane, Phnom Pehn, Bac Ninh, Can Tho, Palembang, Solo, Penang, Kuching, Ilo Ilo, and Cagayan de Oro.
- USAID – Water Supply and Sanitation Priorities, Twinning Partnership
- **The Economics of Climate Change in Southeast Asia: A Regional Review (ADB).**
 - Conducted study throughout Indonesia, Philippines, Singapore, Thailand, and Vietnam
 - Includes the economic costs and benefits of unilateral and regional actions.
- **UNEP support:** Supporting Action on Climate Change through a network of National Climate Change Focal Points of Southeast Asia
- UNEP Climate Change Adaptation Project
- **USAID support:** ASEAN – US Technical Assistance and Training Facility
- **Etc....**

Other Initiatives

- **Cool Asean Green Capitals** - during the 11th Informal ASEAN Ministerial Meeting on the Environment in October 2008, the Ministers noted the need for the implementation of this Initiative to be synergised and in line with the existing ASEAN bodies such as the ASEAN Working Group on Environmentally Sustainable Cities (AWGESC)

Terima Kasih
Thank You