

Institute for Global Environmental Strategies

Institute for Global Environmental Strategies (IGES)

Takashi Otsuka



About IGES

- **International Research Institute** which conducts practical and innovative research for realizing **sustainable development in the Asia and the Pacific**.
- Established in 1998. Charter signed in Kyoto in 1997 in the occasion of COP3.
- Designed to create useful impacts **on the four-year basis (phase)**.
- Researchers **from diverse countries** other than Japan (about 1/3 of staff : non-Japanese).



Global Network



Signatories of the Charter of Establishment of IGES

- Administrative Organisations (16)
- International Organisations (6)
- Research and Academic Institutions (26)

Mission and Vision

- To conduct **strategic research** “(towards the realisation of a sustainable Asia Pacific)
- To redefine the values and value systems of our present societies that have resulted in the global environmental crisis, in order to create new ways of conducting activities and a new paradigm for civilization, and to build new social and economic systems based on the principles of the new paradigm”.
- To this end, IGES aims to act as a **change agent**, promoting the global transition towards a sustainable society.

Modes of Operation

(i) Synthesis Research

- to contribute to **determining framework** for international **agenda-setting** and debate.

(ii) Problem-driven and Solution-oriented Policy Research

- to contribute to tangible knowledge and wisdom for the transition to sustainable.

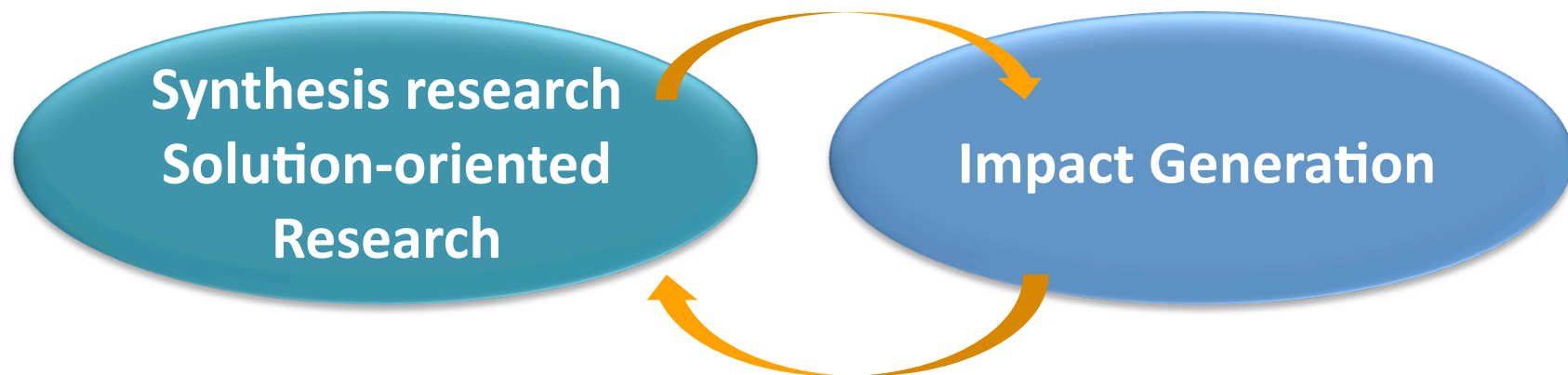
(iii) Networking and Strategic Operation

- challenge for **impact generation**.

* **trans-science approach** based on collaboration among stakeholders

Research and Impact Generation

- **Two-way and continuous process** of mutual influences.
- Strategic research creates **meaningful impacts** into international/regional/national/local/(community) policy processes.
- International policy processes generate **new research agendas**.



Research Focus Areas (FY2013-FY2017) (Provisional)

6th Phase Research Structure

Environment

Climate and Energy

Sustainable Consumption and Production

Natural Resources and Ecosystem Services

Economic

Green Growth and Green Economy

Business and Environment

Social

Integrated Policies for Sustainable Societies

Sustainable Cities

Creating, harnessing and disseminating knowledge for a sustainable future in Asia

- stretching-out **low-carbon development** in Asia
- making **sustainable consumption and production** a reality in developing Asia
- maintaining and enhancing the **resilience** of the natural resources and ecosystem services that **support local livelihoods in Asian countries**
- **greening economy and business** for human well-being, including the creation of green employment.
- **empowering people** for the transition to sustainability
- providing practical knowledge and measures for **cities facing sustainability challenges**

Impact on Policy Formulation

IGES is actively involved in major policy processes such as UNFCCC-COP, CBD-COP, G8/G20, TEMM, EAS-EMM directly or through specific initiatives :

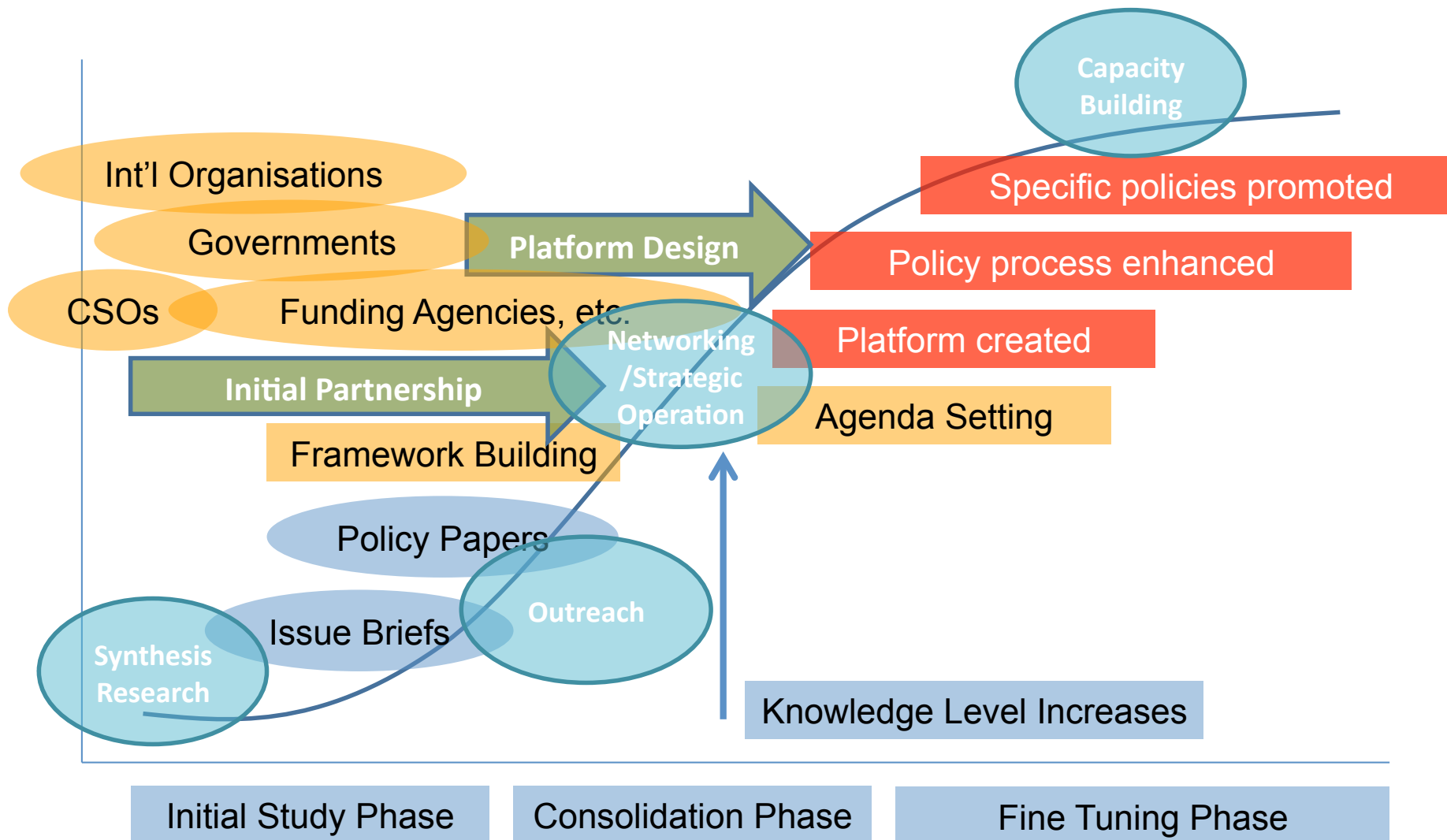
Asia Environmental Compliance and Enforcement Network (AECEN) / Asia Pacific Adaptation Network (APAN) / Asia-Pacific Forum for Environment and Development (APFED) / Asia-Europe Environment Forum (ENVForum) / Regional 3R Forum in Asia / International Research Network for Low Carbon Societies (LCS-RNet) / Low Carbon Asia Research Network (LoCARNet:) / Asia-Pacific Co-benefit Partnership / Water Environment Partnership in Asia (WEPA) / Asia-Pacific Water Forum Regional Water Knowledge Hub Network (APWF RWKH) / Sustainable Development Planning Network for Asia-Pacific (SDplanNet-Asia&Pacific) / Clean Asia Initiative (CAI) / Asian City Network for Environmental Improvement / Indonesia Climate Change Program Loan (ICCPL), etc.

Contribute to Policy Formulation

through information dissemination
and policy recommendations
based on research outcomes



Ways of Working / Strategies (1)



LoCARNet: Low Carbon Asia Research Network

Aims to formulate and better enable the implementation of science-based policies for low-carbon development in Asia to facilitate the realisation of a low-carbon and sustainable society.

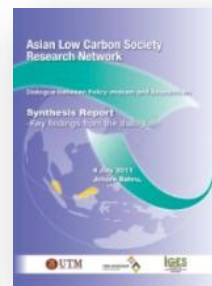


- LCS-RNet Secretariat has been conducting workshops in 4 Asian countries with NIES/AIM team. During the course of these workshops, the growing importance of low-carbon growth in Asia was strongly recognised.
- Japan/LCS-RNet Secretariat proposed the establishment of a network called the “**Low Carbon Asia Research Network (LoCARNet)**” at ASEAN+3 EMM held in October 2011 in Cambodia.
- At the “**East Asia Low Carbon Growth Partnership Dialogue**” on 15 April 2012, it was agreed to work towards establishing the “**East Asia Knowledge Platform for Low Carbon Growth**”, as an open, multi-layered, flexible all stakeholders’ network for sharing knowledge towards low-carbon growth in Asia.
- **LoCARNet** was declared its launch at the side-event of the **partnership dialogue**. LoCARNet will take part in the **knowledge platform** as **a central core for providing knowledge**.

LoCARNet: Low Carbon Asia Research Network

An open network of researchers, research organisations, as well as like-minded relevant stakeholders that facilitates the formulation and implementation of science-based policies for low-carbon development in Asia.

Lessons learnt from activities and outcomes from dialogues between Researchers and Policy-makers in Asia



Synthesis Reports: <http://lcs-rnet.org/publications/index.html>



2012 October in Thailand (LoCARNet 1st Annual Meeting)

Seven priority topics were discussed: “policy-making processes and use of integrated assessment models”; “land use and forestry”; “GHG inventories as bases”; “low-carbon cities”; “local level practices/ decisions / initiatives”; “institutionalisation of low-carbon green growth”; and “technology for leapfrogging”.

Characteristics and Uniqueness of the LoCARNet

- **Network of leading researchers/research organisations** who are deeply involved in low-carbon growth policy processes in this region.
- **Science-Science-Policy Dialogue:** LoCARNet promotes research for policies towards low-carbon growth by enabling a sufficient amount of dialogue among/between scientists and policy-makers.
- **Ownership of knowledge by countries:** LoCARNet encourages collaboration amongst researchers in-country whose research capacity and scientific knowledge are firmly grounded in their home countries.
- **Regional South-South-North Collaboration:** LoCARNet aims to increase in research capacity in the AP region through knowledge sharing and information exchange, in the scheme of regional not only north-south cooperation, but also south-south regional cooperation.



1 2 3

Asia Pacific Adaptation Network (APAN)

The Asia Pacific Adaptation Network (APAN) was established in October 2009 as part of the Global Climate Adaptation Network (GAN). It aims at building the climate resilience of vulnerable human system, ecosystem, and economies through the mobilizations of knowledge and technologies to support adaptation capacity building, policy-setting, planning and practices. APAN is the first network under the GAN supported by the UNEP, IGES, AIT-UNEP RRCAP, ADB, SIDA, and APN.



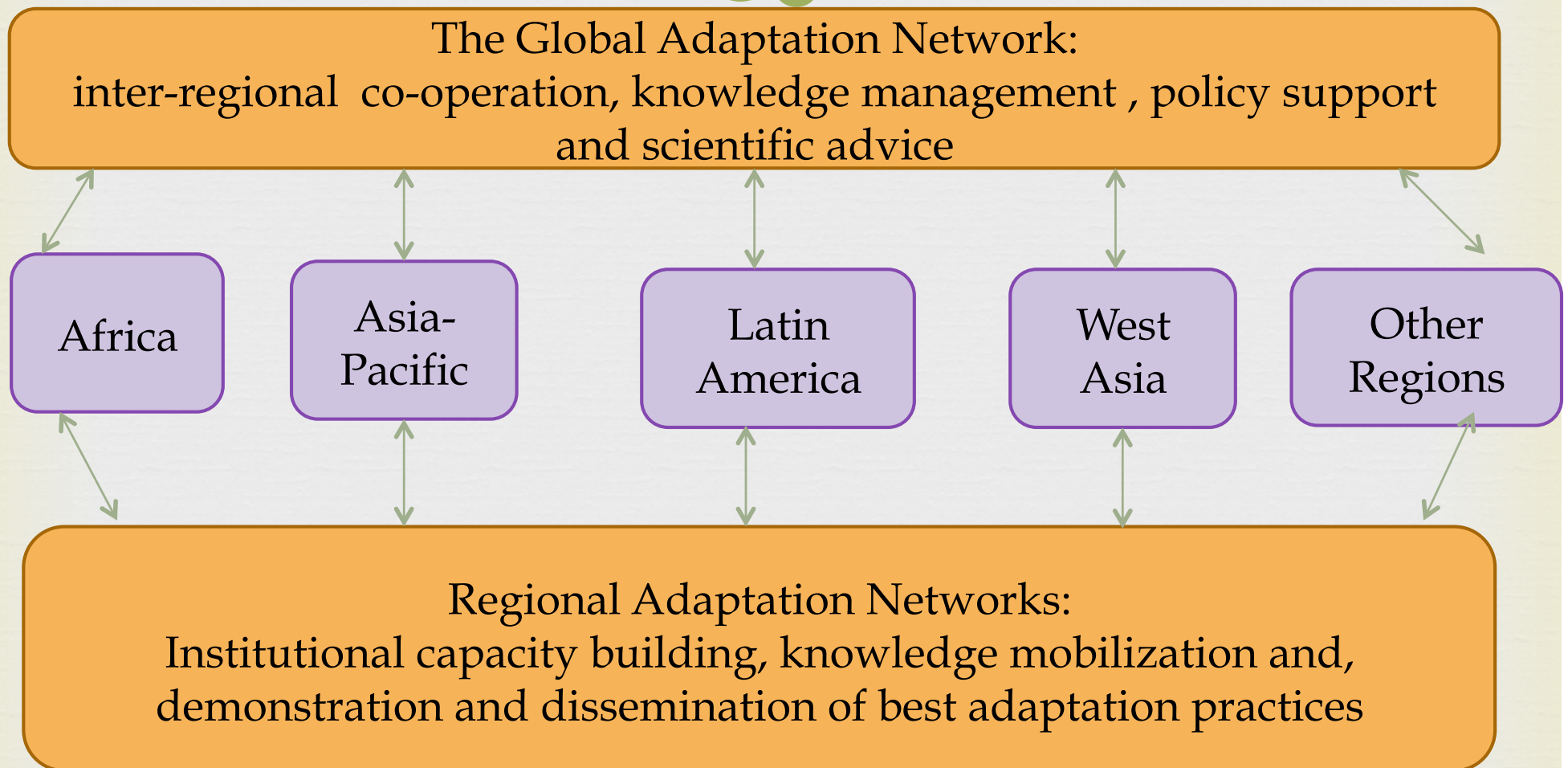
Overall goal of APAN

Help build climate resilience of vulnerable human systems, ecosystems and economies through the mobilization of knowledge and technologies to support adaptation capacity building, policy-setting, planning and practices.

IGES plays a leading role of APAN operations.



UNEP's Global Climate Change Adaptation Network (GAN)



Sub regional Nodes

Sub Regions	
Southeast Asia	ICLEI- Local Governments for Sustainability (ICLEI)
Central Asia	Central Asian Regional Environmental Centre (CAREC)
Northeast Asia	RCCCA (Keio University)
Pacific	Secretariat of the Pacific Regional Environment Programme (SPREP)
South Asia	Climate Action Network for South Asia (CANSA)

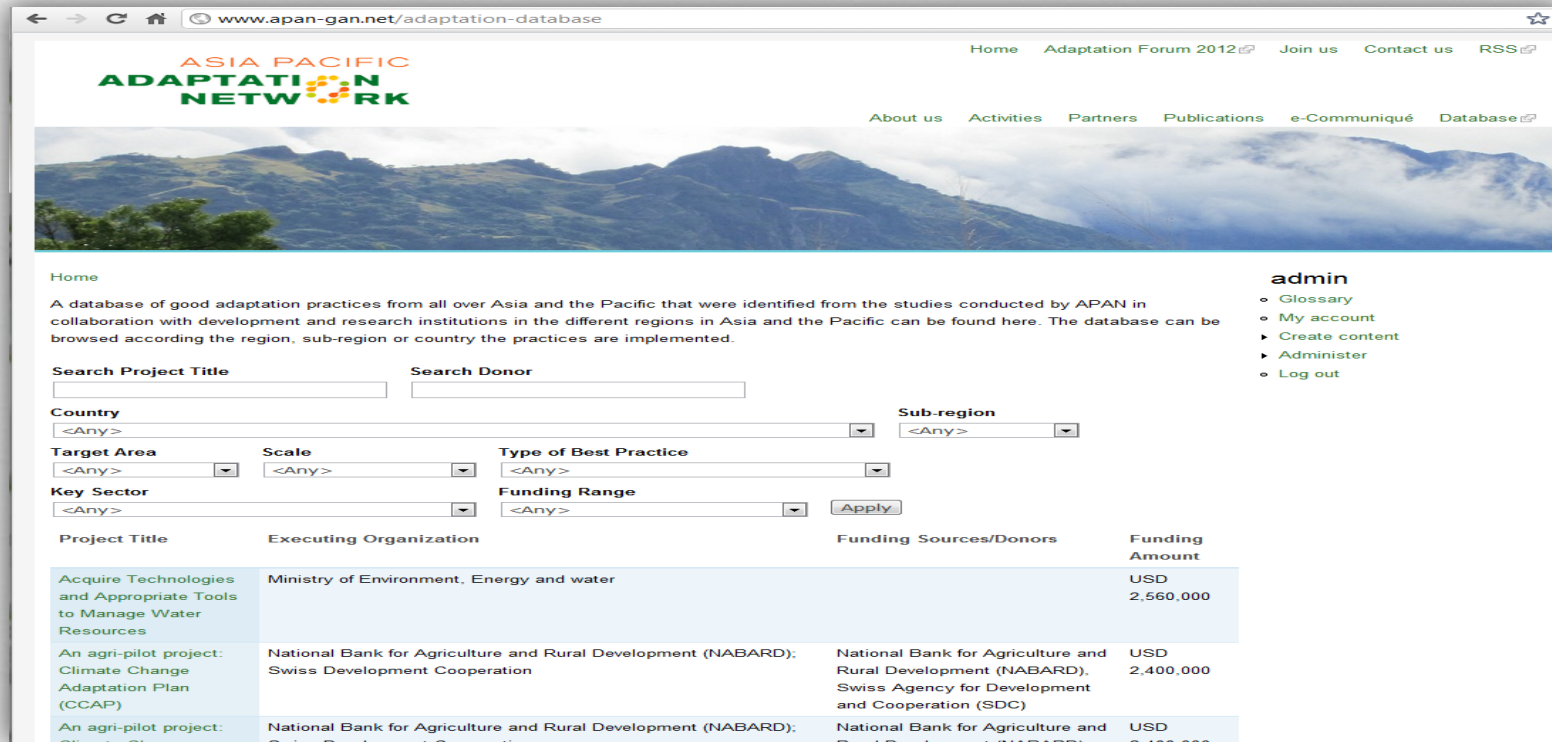
Thematic Nodes

Thematic Area	Thematic Nodes
Water	Global Water Partnership South Asia (GWPSAS)
Mountains	International Centre for Integrated Mountain Development (ICIMOD)
Agriculture	Southeast Asia Regional Centre for Graduate Study and Research in Agriculture (SEARCA)

Structure of APAN



Databases on good adaptation practices and technologies



The screenshot shows the website for the Asia Pacific Adaptation Network (APAN). The page features a search interface with various filters and a table of project entries. The filters include search boxes for Project Title and Donor, and dropdown menus for Country, Sub-region, Target Area, Scale, Type of Best Practice, Key Sector, and Funding Range. An 'Apply' button is located below the filters. The table below the filters lists project titles, executing organizations, funding sources/donors, and funding amounts.

Project Title	Executing Organization	Funding Sources/Donors	Funding Amount
Acquire Technologies and Appropriate Tools to Manage Water Resources	Ministry of Environment, Energy and water		USD 2,560,000
An agri-pilot project: Climate Change Adaptation Plan (CCAP)	National Bank for Agriculture and Rural Development (NABARD); Swiss Development Cooperation	National Bank for Agriculture and Rural Development (NABARD); Swiss Agency for Development and Cooperation (SDC)	USD 2,400,000
An agri-pilot project: Climate Change	National Bank for Agriculture and Rural Development (NABARD); Swiss Development Cooperation	National Bank for Agriculture and Rural Development (NABARD)	USD 2,400,000

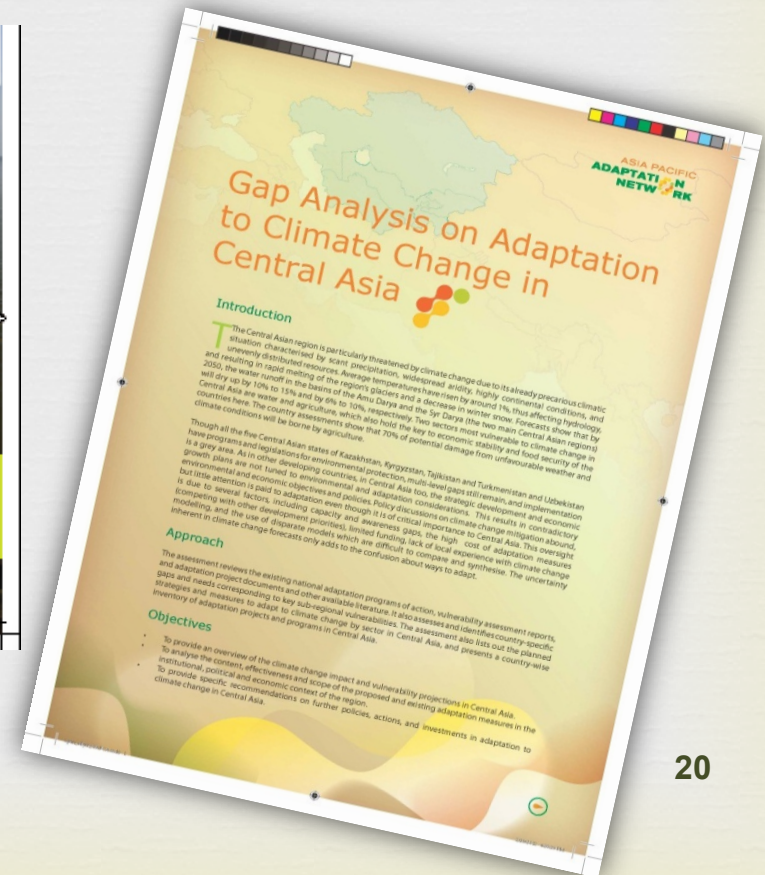
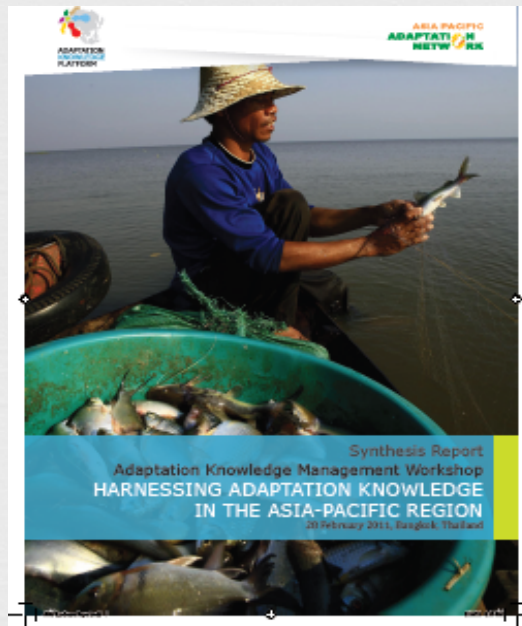
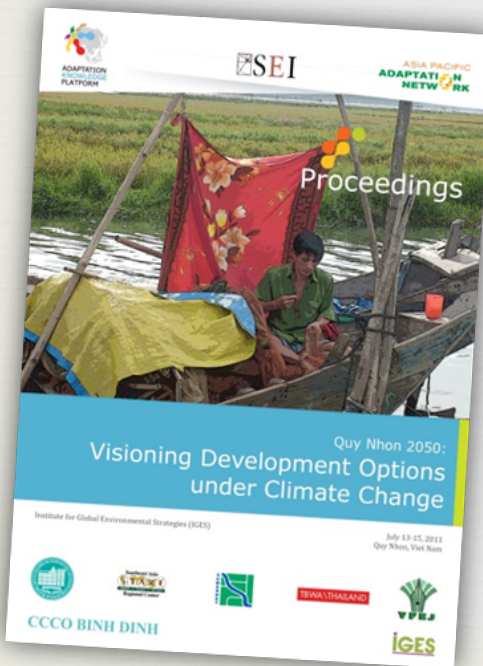
Online database of good adaptation practices and technologies.

www.apan-gan.net/adaptation-database

APAN Outputs: Publication on trainings, seminars, workshops and research



Publication: Training, seminar, workshop and study.



ASEAN ESC Model Cities Programme



ASEAN ESC Model Cities Programme (Year 1)



Funder
Japan-ASEAN
Integration Fund
(JAIF)



Japan-ASEAN Cooperation

**Regional
Secretariat**



ASEAN Secretariat



An initiative by the
**ASEAN Working Group on
Environmentally Sustainable Cities
(AWGESC)**

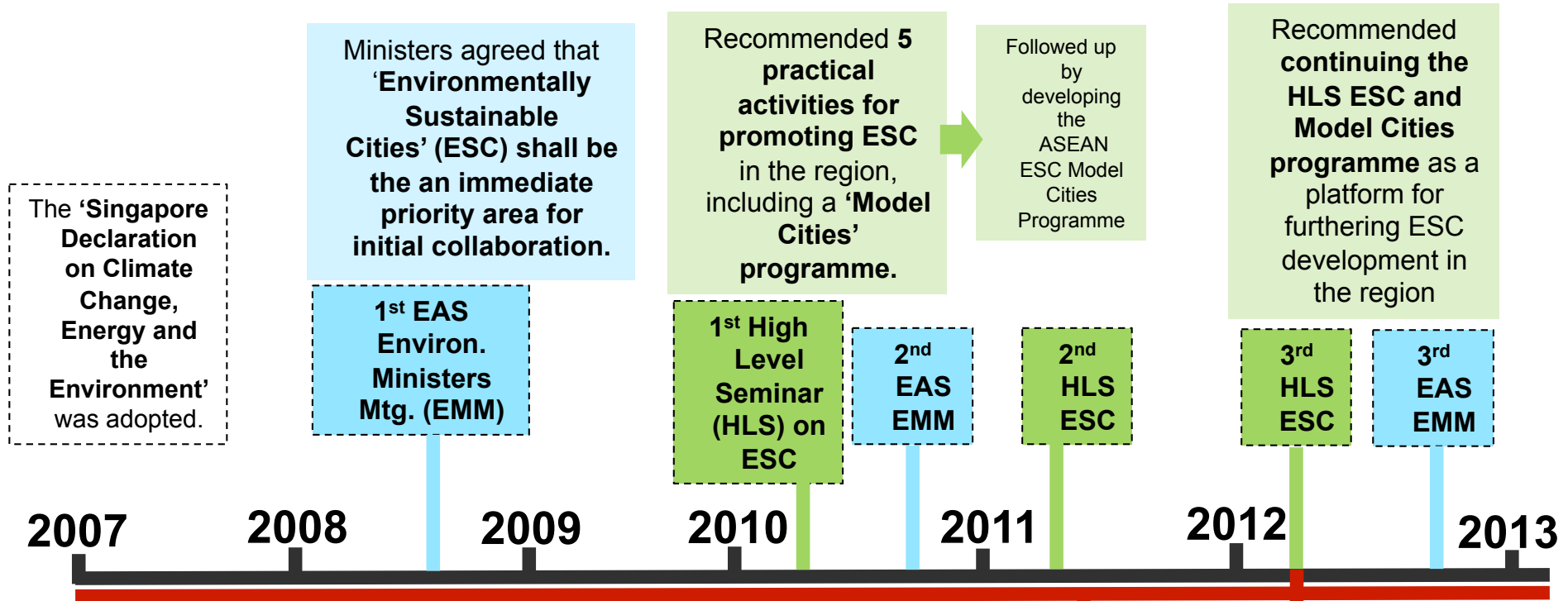
•**Objective:** Promoting ESC development by supporting **capacity building for bottom-up initiatives of ASEAN cities** and supporting **formulation of national ESC frameworks.**

•**Year 1: Apr. 2011 - Mar. 2012**

•**Year 2:** (t.b.c.) Proposal submitted to JAIF, awaiting results)

•**Assistance to: 14 cities in 8 countries** (Cambodia, Indonesia, Lao PDR, Myanmar, Malaysia, Philippines, Thailand and Viet Nam)

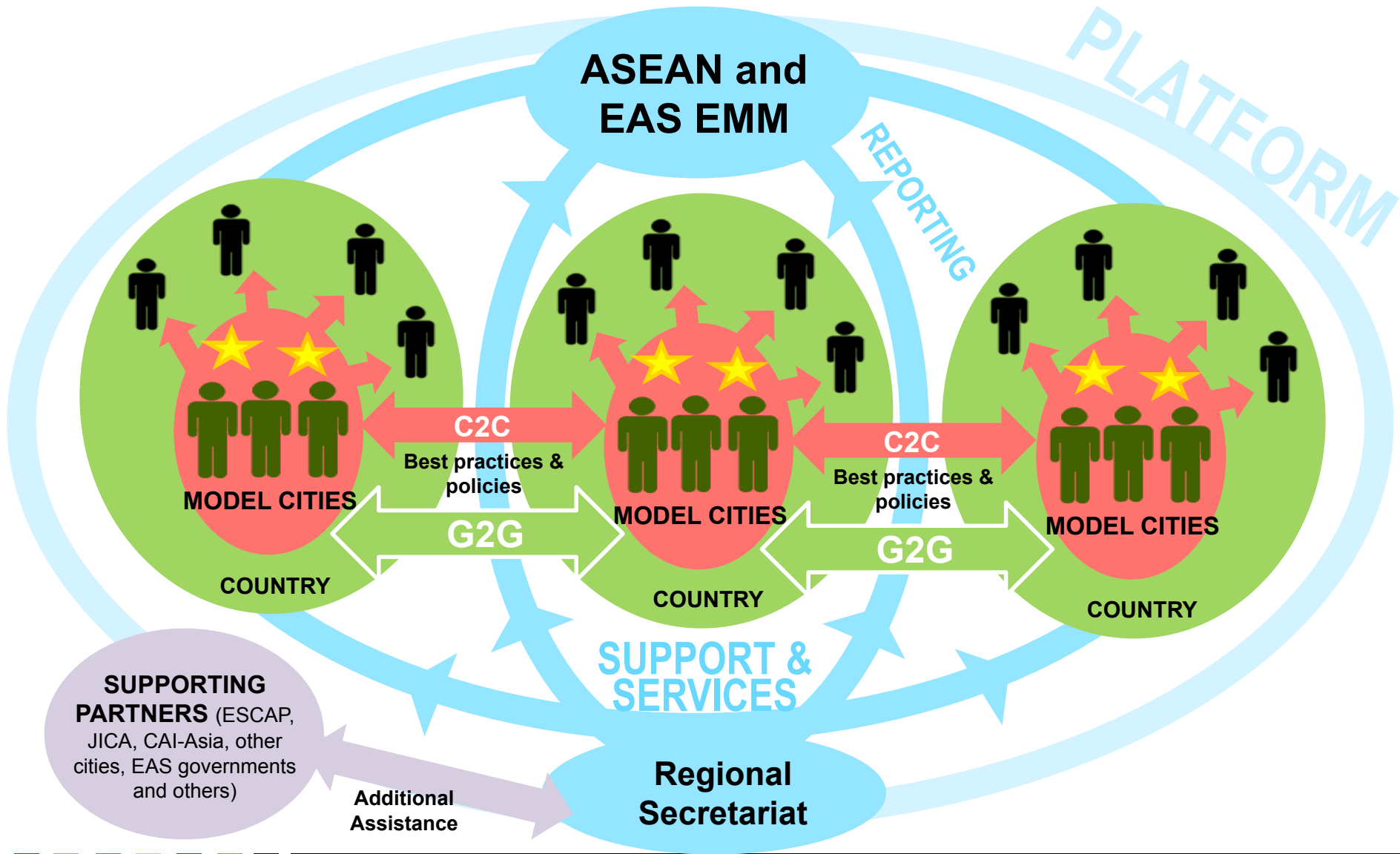
Background of the programme



•ASEAN ESC Model Cities Programme is the first practical initiative under the EAS EMM framework
 •It is designed to support the EAS Environment Ministers priority area of Environmentally Sustainable Cities (ESC)



The programme's approach and implementation



Selected Model Cities (Year 1)

Country	Model Cities	Main Activities
Cambodia	Phnom Penh	Reducing plastic bag usage in shops
	Siem Reap	Piloting a community-based waste separation scheme
Indonesia	Palembang	Replicating a successful waste bank in Yogyakarta as part of a nationwide rollout
	Surabaya	
Lao PDR	Xamneua	Strengthening project management skills and mini demo-projects in waste management, wastewater treatment and urban greenery
Myanmar	Yangon	Training on sustainable water supply and treatment
Malaysia	Kuching North	Developing a local formula of Bokashi composting and piloting a compost centre
Philippines	Puerto Princesa	Training for composting, water management and piloting a new system of wastewater treatment
	Palo, Leyte	Training for composting and water management
Thailand	Maehongson	Promoting waste segregation and recycling through education and training
	Muangklang	Promoting and training for low carbon city plan implementation and organic farming
	Phitsanulok	Supporting the scale-up and dissemination of the “Phitsanulok Model” of waste management
Viet Nam	Cao Lanh	Establishing a local-level multi-stakeholder ‘self-protection’ committee for the environment and formulation of its strategy
	Da Nang	Creation of a ‘Model Environmentally-friendly Residential Area’ with pilot projects

Highlights of Selected Cities

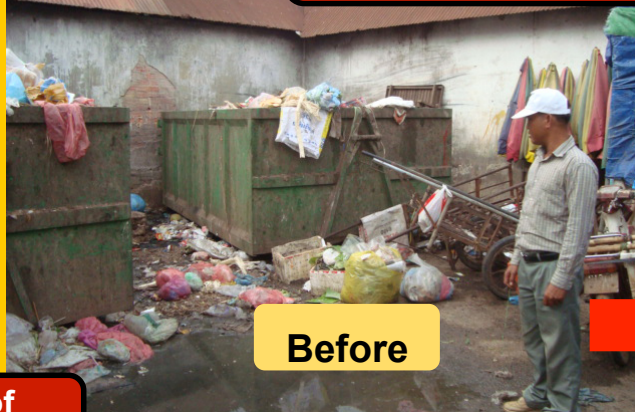


PHNOM PENH

Reducing use of plastic bags

SIEM REAP

Waste segregation and organic waste reduction



Before



After

CAMBODIA INDONESIA



PALEMBANG

Established over 55 pilot Waste Banks in 6 months

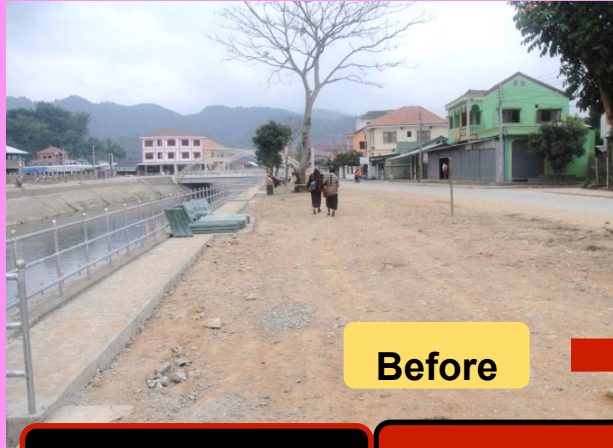


SURABAYA

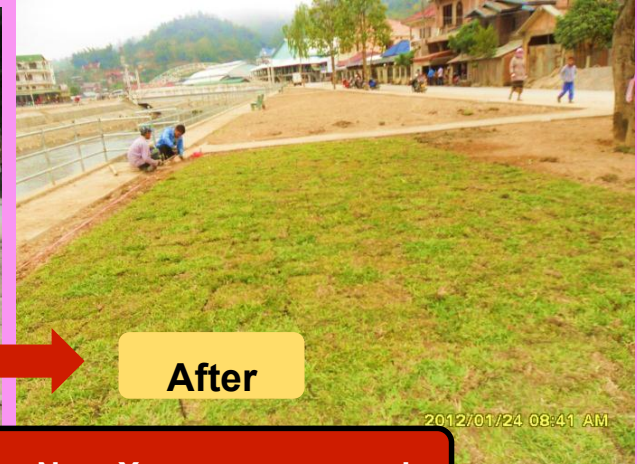
Highlights of Selected Cities



Producing bio-waste extract
fertiliser from composting



Before



After

XAMNEUA

Banks of River Nam Xam were greened

**LAO PDR
MALAYSIA**



Learnt from Thailand and
Japan on organic waste
management



**NORTH
KUCHING**



Highlights of Selected Cities



**YANGON, MANDALAY, NAY PYI TAW
NYAUNG SHWE & MEIKHTILA**



**Training on water supply and
quality management by Penang
city, Malaysia**



MYANMAR

**PALO,
LEYTE**

**Learnt from Puerto Princesa on
solid waste management**



**Low-cost wastewater treatment
and composting**

PHILIPPINES



**PUERTO
PRINCESA**

Highlights of Selected Cities



MAEHONGSON

Wastewater treatment training

MUANGKLANG

Low Carbon City Campaign



PHITSANULOK



Train the trainers community-based waste management

THAILAND

VIET NAM

CAO LANH

Large-scale campaign targeting 10,000 children in 20 schools



Self-governing environmental protection units formed

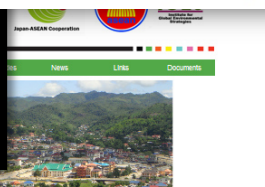
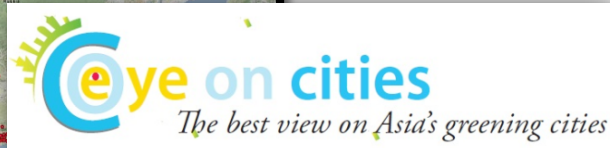


DANANG

Establishing pilot Environmentally Friendly Wards



Outreach and knowledge management – towards Year 2



Website

What is the ASEAN ESC Model Cities Programme?

The ASEAN ESC Model Cities Programme is a regional initiative funded by the Japan-ASEAN Integration Fund (JAIF) promoting the development of Environmentally Sustainable Cities (ESC) across ASEAN countries via remote programmes encouraging and supporting innovative and voluntary bottom-up initiatives through capacity building, training and other methods.

In so doing, the programme aims to support ASEAN countries in the creation of model cities to serve as examples across the region of how local governments can take the lead in pursuing sustainable development at the local level. [Read more...](#)

Who are the Model Cities?

The Model Cities have been confirmed and will incorporate 14 cities across 8 countries. [Read more...](#)

COUNTRY	CITY	ACTIVITIES PROPOSED
CAMBODIA	Banteay Meanchey	Reducing plastic bag usage in shops
	Siem Reap	Setting a biocommunicable waste separation scheme
INDONESIA	Surabaya	Implementing a successful waste bank in Yogyakarta as part of a nationwide rollout
LAO PDR	Vientiane	Strengthening project management skills and mini-demos in waste management, wastewater treatment and urban greening
Malaysia	Sejring Negeri	Developing a local formula of biochar composting and piloting a compost centre
MYANMAR	Yangon	Training for final disposal site management, resource treatment, waste to energy, methods and water purification
PHILIPPINES	Palolo	Training for composting, water management and piloting a new system of wastewater treatment
	Rosheh	Training for composting and water management
	Maungklang	Promoting waste segregation and recycling through education and training

<http://modelcities.hls-esc.org>

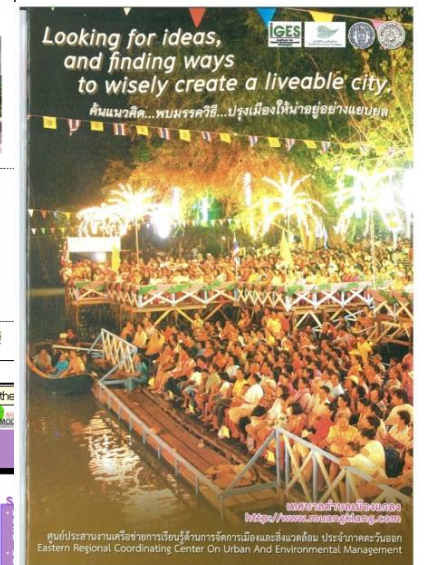
Online Map

Knowledge Hub

Under development

INDONESIA Model City Activities Fact Sheet PALEMBANG-SURABAYA

Thailand Model City Activities Fact Sheet MUANGKLANG



Publications and Fact Sheets

Promote International & Regional Discussions

ISAP: International Forum for Sustainable Asia and the Pacific

ISAP4: Steering towards a sustainable and resilient future (26-27 July 2012, Yokohama, Japan)

- Co-organized by IGES and UNU-IAS.
- Collaborators: UNESCAP, UNEP, and ADB.
- Participants: 850 people
- Themes: Follow-up to Rio+20 including green economy and SDGs, climate change, and resilience



Dr. Rajendra K. Pachauri



Prof. Dr. Klaus Töpfer



Quick observation

- Inter-disciplinary
 - How serious are we and to what extent are we committed to the reality?
 - Problem-driven and solution oriented
- Trans-disciplinary
 - Co-design and co-produce
 - Staff exchange
- Scientific quality assurance and impact generation
 - Quality criteria for inter-disciplinary research
 - Evaluation criteria for trans-disciplinary research
 - Timing matters



Thank you very much for your attention!

**Institute for Global Environmental
Strategies (IGES)**

2108-11 Kamiyamaguchi, Hayama,
Kanagawa, 240-0115 Japan

<http://www.iges.or.jp/en/index.html>