

# **GEC's Supporting Activities for UNEP-IETC's Waste Management Programs**

Makoto Fujita

Manager, Planning and Coordination Department,  
Global Environment Centre (GEC), Osaka, Japan

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# Profile of GEC

- The Global Environment Centre (GEC) was established in 1992 as a supporting organization of the UNEP/International Environmental Technology Centre (UNEP/IETC) in Osaka, Japan, with a capital endowment from Osaka City Government and Osaka Prefecture Government.
- GEC is providing support to UNEP/IETC, such as facility sharing, assistance in organizing workshops and conferences, etc. GEC also acts as an intermediary between IETC and various organizations/institutions in Japan, to help ensure that IETC's activities proceed smoothly and efficiently.

# IETC's Waste Management Workshops/Meetings Organized in Cooperation with GEC

- **Integrated Solid Waste Management (ISWM) and Global Partnership on Waste Management (GPWM)**

Oct. 2009 Regional Training Workshop on ISWM based on 3R

Nov. 2010 2nd Consultation Meeting on GPWM

Apr. 2012 Asia-Pacific Workshop on GPWM and ISWM

Nov. 2012 GPWM Biennium Conference

- **Waste Electrical and Electronic Equipment (WEEE/E-waste)**

July 2010 Regional Workshop on E-waste Management

July 2011 E-waste Management Workshop on Tack-back System

July 2012 Multi-Stakeholder Policy Dialogue: Addressing E-waste Challenges and Opportunities through Public-Private Sector Cooperation

- **Others**

June 2009 International Expert Group Workshop on Compendium of EST for Converting Waste Plastics into a Resource

Mar. 2010 Regional Workshop on Waste Agricultural Biomass

Mar. 2012 Seminar on Management of Debris Created by the Tohoku Tsunami: International Experience Sharing

# Features of IETC's Activities

- **Holistic, systematic, and practical approaches**

E.g. Project implementation:

guidelines/manuals/technology compendiums

→ workshops/training → demonstration projects

→ replications to other locations

E.g. Approach for ISWM implementation:

inventory survey → assessment and gap identification

→ target setting and issues → planning

- **Oriented to needs and fundamental causes**

E.g. E-waste management workshops:

training → take-back system → public-private dialogue

E.g. Global Partnership on Waste Management (GPWM):

Enhance international cooperation among stakeholders, avoid duplication of efforts, complement existing work, identify and fill information gap

# Policy in Supporting IETC Activities

- **Selection of target activities**

Among IETC's proposed or ongoing programs, target activities are selected based on IETC's suggestions/requests through in-depth consultation between IETC and GEC.

- **Strategy in implementing support activities**

When implementing support activities, GEC is trying to incorporate providing opportunities for Japanese local administrations, the private sector, and the general public to participate in IETC's events/activities and to introduce their environmental initiatives, approaches, and technologies to developing countries as much as possible.

# Asia-Pacific Workshop on Global Partnership on Waste Management (GPWM) and Integrated Solid Waste Management (ISWM), 16-20 April 2012

## ■ Participants from overseas:

Representatives of national/local governments, research institutions and international organizations from 15 countries (Bangladesh, Cambodia, India, Kenya, Korea, Lao PDR, Malaysia, Mongolia, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, Vietnam)



Workshop session, 16-20 April 2012  
(at GEC meeting room)

## ■ Participants from Japan:

MoE, MoFA, METI, NIES, AIST, JICA, IGES, Osaka City, Kawasaki City, Osaka Univ., UNCRD, UNITAR, WHO Kobe, a-Socca, BGCT, Environmental Strategies Inc., Hitachi Zosen, Mitsui & Co., ORIX Environmental Resources Management, Panasonic, Plantec, Rematec, etc.



Field visit on 20 April 2012  
(Waste incineration plant & landfill site in Osaka)

# Multi-Stakeholder Policy Dialogue: Addressing E-waste Challenges and Opportunities through Public-Private Sector Cooperation, 18-20 July 2012

## ■ Participants from overseas:

National governments, international organizations, e-products manufactures, recyclers, research institutions and NGOs from 18 countries (Argentina, China, Egypt, Indonesia, Kenya, Malaysia, Nigeria, Pakistan, Russia, Singapore, Sweden, Switzerland, Thailand, Trinidad and Tobago, UK, USA, Vietnam, Zambia)

## ■ Participants from the private sector:

Canon, Dell, DOWA Eco-system, EX Research Institute, Hewlett-Packard, Institute of Scrap Recycling Industries, Kokusai Kogyo, Mitsui & Co., Nokia, ORIX Eco Services, ORIX Environmental Resources Management, Panasonic, RWEC, Shan Poornam Metals, SHARP, Sims Metal Management, TES-AMM,



Dialogue session, 18-19 July 2012  
(at Tsurumi-no-mori Guest House, Osaka)



Field Visit, 20 July 2012 (End of life home  
appliance collection plant and recycling plant)

# Global Partnership on Waste Management (GPWM) Biennium Conference, 5-6 November 2012

## ■ Participants: 184

Representatives of national/local governments, international organizations, private sector, research institutions, academia, NGOs from 41 countries (including high-level officials)

Argentina, Australia, Austria, Bangladesh, Belgium, Brazil, Cambodia, Chile, Costa Rica, Ecuador, Egypt, El Salvador, France, Greece, Guatemala, India, Indonesia, Jamaica, Japan, Kenya, Korea, Lao PDR, Malaysia, Myanmar, Nepal, Nigeria, Peru, Philippines, Russia, Senegal, Singapore, South Africa, Sri Lanka, Switzerland, Thailand, Trinidad and Tobago, UK, Uruguay, USA, Yemen, Zambia



# Global Partnership on Waste Management (GPWM) Biennium Conference, 5-6 November 2012

## ■ Participants from the private sector:

Astec Tokyo, BGCT, Community Policy Institute, D-Waste, EcoLomics International, Ethos Law Office, Euromines, GEEMS Associates, Hitachi Zosen, IDEA Consultants, Japan Research Institute, Kajima Corporation, Kokusai Kogyo, Kubota Environmental Service, Landfill Gas Industries Pty, Maeda Corporation, Mitsubishi Research Institute, Nippon Koei, Ove Arup and Partners Japan, Panasonic, Plantec, Sims Recycling Solutions, Takase Corporation, Toshiba, Urban System Integration, Veolia Environmental Services, ZEN Capital, etc.



# Global Partnership on Waste Management (GPWM) Biennium Conference, 5-6 November 2012

	Presentations/panel discussion	Feedback questionnaire (38)	
		Overseas participants (26)	Japanese participants (12)
Focal areas	Waste & climate change		
	Marine litter	XX	
	Waste agricultural biomass		
	Integrated solid waste management	XX	
	E-waste	X	XX
	Waste minimization	XX	
Strategic / practical	Waste management is a good business		XX
	Research & technology needs	X	
	Disaster debris	XX	
	Waste management & eco-towns	XX	10

## Benefits of Supporting Organization of IETC's Workshops

- Valuable international conferences/workshops can be held in Japan, where delegates from overseas countries including developing countries with UNEP's financial assistance.
- Since GEC co-organizes or supports the workshops/conferences, GEC can call for Japanese private companies and research institutes to participate and give presentations in the workshop, and facilitate:
  - Disseminating information to overseas countries on Japanese environmental technologies, policies, initiatives, etc.;
  - Providing Japanese private companies and others with information on the current situation of developing countries and various initiatives/approaches in the world;
  - Providing Japanese private companies and experts with opportunities to network with delegates from developing countries, to develop new business, and to find new business partners.
- By organizing site visit tours, Japanese technologies and systems regarding waste processing/disposal/recycling can be introduced to delegates from developing countries to increase their understanding.<sup>11</sup>

# Eco-town Workshops Co-organized by GEC and IETC

- Mar. 2009 Bandung Eco-town Workshop: Development of Waste Management Program with Local Participation and Contribution for Eco-town Program
- Aug. 2009 Eco-town Stakeholders Consultation and Training/Awareness Workshops (in Penang and Bandung)
- Sep. 2010 Bandung Eco-town Workshop: Sharing Information and Experiences in Developing a “recycling-oriented society” for Communities and Industries
- Dec. 2011 Penang Eco-town Workshop: Sharing Information and Experiences in Developing a “recycling-oriented society”
- Dec. 2011 Bandung Eco-town Evaluation Workshop
- Dec. 2012 Review and Planning Workshop on Eco-town (in Penang)

# Eco-town Workshops

## Bandung Eco-town Workshop

21 Sep 2010, Bandung City Hall  
100 participants attended



Presentations by Japan and Japanese private companies GEC, UNEP-IETC, IDE-JETRO, Affiliated company of DOWA Group and TORAY Group

## Penang Eco-town Workshop

7 Dec 2011, Cititel Hotel Penang  
140 participants attended



Presentations by Japan and Japanese private companies GEC, UNEP-IETC, Kawasaki City, JETRO Kuala Lumpur Office, Panasonic Environmental Engineering, Mitsui & Co., Canon

# Benefits of Joint Implementation by IETC and GEC

## Benefits to developing countries

- IETC: Provide knowledge to develop frameworks (including policy, strategies, mechanisms, etc.) for eco-town planning to developing countries.
- GEC: Show actual case examples in Japan, e.g. application of environmental technologies, law and regulations, initiatives of various stakeholders, etc.
  - Concrete examples can help developing countries to have ideas for developing policy frameworks.

## Benefits to GEC and Japan

- Through the scheme of UNEP's projects, GEC can introduce Japanese technologies, systems and approaches.
- Since UNEP co-organizes the workshops, they can be often attended by high level officials, such as ministers and mayors, and a lot of participants. And since GEC co-organizes, GEC can invite Japanese private companies to introduce their technologies and initiatives to local participants.

## **Some comments of Japanese private companies participated in IETC's workshop**

- It is difficult for individual private companies to get opportunities to meet government officials of developing countries. It is useful to participate in IETC's workshops for networking with such government officials.
- Laws and regulations regarding waste management differ in each developing countries and are often revised or newly established. Presentations in IETC's workshops are useful to obtain such information.
- It is difficult to know clear and precise needs of developing countries in an organized format from the presentations.
- It is desirable that IETC's whole activities and functions be plainly introduced to Japanese private sector widely.

# Needs of Developing Countries

- In many cases, what national governments and local governments in developing countries require is not an individual technology, but a packaged solution comprised of institutional systems, strategies, approaches, and technologies, etc. To cope with this, the private sector, research institutes, and public organizations should collaborate to each other to provide the best combined solution with their own expertise.
- In cases such as industrial complexes in developing countries, technologies for waste/wastewater treatment are required. But in such cases, a packaged solution might be required considering operation of the whole system.
- In developing countries, the number of manufactures of waste/wastewater treatment facilities/systems are increasing. Accordingly, needs for element technologies, equipment, and devices are increasing.

# Needs of Developing Countries

- National governments and local governments in developing countries need to know their own needs more precisely, in order to facilitate developing policies and strategies. If the needs are clear and precise, it will become easier to receive assistance from donor agencies.
- In waste management, it is necessary for them to implement waste inventory surveys, and assessments of current status and systems to know their own needs.
- IETC's ISWM approach is a good tool for their implementation.

# Future Prospects of GEC's Support of IETC

- Since GEC was established to support IETC's activities as well as to carry out international cooperation for contributing to global environmental protection, GEC continues to carry out activities for these two objectives.
- While Japanese industries are promoting environmental business overseas, GEC will be participating in such activities in a manner to leverage IETC's expertise and experience to contribute to environmental protection in developing countries.