

"Business and the Environment" International Workshop 2006
Proceedings

**Eco-Industrial Clusters Leading
to Sustainable Local Development of Asia**

Date: October 26, 2006 (Thu.) 1:30p.m. - 5:00p.m.

Venue: IHD Centre, Kobe, Hyogo Prefecture, Japan

Organizer: Institute for Global Environmental Strategies (IGES)

Sponsors:

Ministry of the Environment, Hyogo Prefecture, Kobe City, Asia-Pacific Network for Global Change Research (APN), International EMECS Center, Hyogo Prefectural Environmental Create Centre Public Corporation, Hyogo Prefecture Liaison Conference for Air Environment Conservation, Global Environment Forum-KANSAI, Kansai Council, Kansai Economic Federation, The Federation of Chamber of Commerce and Industry in Hyogo Prefecture, Hyogo Environmental Advancement Association, Hyogo Prefecture Association for Corporate Environmental Conservation, The New Industry Research Organization and The Osaka Chamber of Commerce and Industry.

"Business and the Environment" International Workshop 2006

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Eco-Industrial Clusters Leading to Sustainable Local Development of Asia
- Experiences of India, Thailand, Viet Nam and Japan -

Synthesis

Eco-industrial clusters shall be defined as geographic concentrations of interconnected industries in a specialised field that cooperate with each other to efficiently share resources like energy, materials, water, and information. Given the prevailing political belief that industrial clusters located in urban fringe areas can be vehicles for environmental conservation and economic development, a sound understanding of eco-industrial strategies is important in the context of their sustainability. It is also vital to employ appropriate technologies and policy measures to transform such industrial clusters into eco-friendly economic zones.

The international workshop "Eco-industrial Clusters Leading to Sustainable Local Development" was organised by the Institute for Global Environmental Strategies (IGES) on 26 October, 2006. The objective of the workshop, as stated by Prof. Suzuki, the Director of Kansai Research Centre (KRC), was to discuss the pros and cons of a wide range of environmental management strategies relating to industrial clusters located in urban-rural fringe areas. The keynote speech delivered by Dr. Anbumozhi, highlighted the sustainability potentials of eco-industrial clusters and the strategic importance of locating them in urban-fringe areas as a way to exploit the numerous environmental, economic, and social linkages. Four interesting case studies from selected economic sectors in Asian countries, as presented by Mr. Nakashima (Japan), Prof. Nagendran (India), Prof. Visvanathan (Thailand) and Prof. Van Ha (Viet Nam), emphasised the importance of inter-firm networks, integrated policy guidance, enabling technologies, and social capital creation as necessary conditions for the development of such eco-industrial clusters (EIC). The panel discussion was led by Prof. Gunjima and included all resource speakers including Dr. Shibusawa, who represents a community-based environmental organisation, focused on a composite investment strategy for strengthening the functional characteristics of eco-industrial clusters where material and waste exchanges are reduced, local resources are optimised, micro-finance mechanisms induce innovations, and international cooperation promotes efficient operations. Consequently, this brings higher socio-economic benefits to the local community. The issue of the need for integrated policy planning on a national level to promote such EIC was also discussed.

This workshop is a part of KRC/BSS research, which aims to promote appropriate management, and technological, institutional and policy measures for developing eco-industrial clusters in rural urban fringe areas as a means of integrated environmental and economic planning. Preparation of a Policy Brief and an "IGES Source Book on Eco-Industrial Clusters" is also under the purview of the ongoing research.



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Coordinator: Takashi Gunjima

(Acting Project Leader, Business for Sustainable Society (BSS) Project,
IGES Kansai Research Centre / Professor, Doshisha University)

Panelists: Juichi Shibusawa

(Managing Director, Environmental NPO "SHU" - Network for Forest Conservation
and Sustainable Use - Tokyo, Japan)

Koichiro Nakashima, Chettiyappan Visvanathan, Nguyen Thi Van Ha,
Ramachandra Murthy Nagendran and Venkatachalam Anbumozhi

Opening Address

Yutaka Suzuki

Director, IGES Kansai Research Centre
Institute for Global Environmental Strategies (IGES)

It is my great pleasure to say a few words at this opening of the 2006 International Workshop on "Business and the Environment." Thank you very much for taking the time to be here today, to attend the international workshop of IGES Kansai Research Centre. As an organizer, I am grateful and honored to have the presence of leading researchers and panelists from Japan and abroad, as well as so many participants from businesses, industrial organizations, and universities.

Established in June 2001, IGES Kansai Research Centre celebrated its fifth anniversary this year. Over the last five years, we have been conducting strategic research on "Business and the Environment," - the theme of our centre since its inception, in close cooperation with industry.

The third-phase strategic research project of IGES, the "Business for Sustainable Society Project", was launched in 2004, and this is the last year of the project. Among the research themes of this project, "Eco-Industrial Clusters Leading to Sustainable Local Development of Asia," which is the subject of today's workshop, clearly focuses on Asia. Exploring ways to achieve sustainable local development is an issue of critical importance to Asia, the region which is undergoing rapid economic development, and it is also a central issue that IGES has been addressing. In this research, we have focused on urban-rural fringe areas and have been examining how we can transform industrial clusters existing in these areas into environment-friendly economic zones, and eventually to achieve sustainable development of Asia. I think it is an issue of equal importance to Japan, too.

The research has been conducted through partnership with three regional universities, namely, the Asian Institute of Technology in Thailand, Anna University in India, and Ho Chi Minh City University of Technology in Vietnam. In this workshop, we look forward to very interesting research presentations by outstanding researchers from these three universities.

We will also have a presentation on a domestic industrial experience, which will be given by Mr. Nakajima from Maniwa City in Okayama Prefecture. The presentations will be followed by a panel discussion, which will include the participation of Dr. Shibusawa who has extensive knowledge and experience in this field as a representative of an environmental NPO.

I encourage all of you to participate in the discussion to make this workshop a success and to contribute to achieving sustainable local development of Asia.

With that, I would like to conclude my brief opening address. Thank you very much.