

September 2, 2010

- Review Report -

Peer Review of the 4th Phase Business and Environment Project of IGES

1. Introduction

With aims to examine to what extent studies and activities conducted in the 4th phase (FY2007-2009) have satisfied original targets of the studies, and what meaningful impacts have been created in policy processes, the peer-review meeting of the Business and Environment (BE) project was held on 2 September 2010 at IGES Kansai Research Centre (KRC) based in Kobe, Japan. Two professors were invited as members of the review panel. One is Prof. Shiqiu ZHANG from College of Environmental Science and Engineering, Peking University, China. The other is Prof. Kazuo MATSUSHITA from Graduate School of Global Environmental Studies, Kyoto University, Japan. Prof. Zhang was also appointed as the chair of the review panel and led the peer-review session. The assessment of the project was appropriately undertaken according to the peer-review guidelines provided by Project Management Office (PMO) of IGES. The review is summarized as follows in this report.

2. Procedures of the peer-review meeting

The detailed agenda of the peer-review meeting is attached in the annex.

At the beginning, Prof. Hironori HAMANAKA, the Chair of IGES, gave opening remarks with kind greetings to peer reviewers and other attendees, and outlined the objectives of the peer-review meeting. Prof. Yutaka SUZUKI, Director General of KRC, outlined the research activities conducted in the 4th phase and the ongoing studies in the 5th phase (FY2010-2012) at KRC.

Prof. ZHANG, as the chair of the review panel, coordinated the review session. Two major researches under the BE project in the 4th phase were presented by the related researchers at KRC. One is 'Proactive Policies and Business Strategies for Strengthening Corporate Environmental Management in Developing Asia' (Hereinafter referred as 'CEM Project'). The other is 'Local Business Initiative: Feasibility on ESCO Aiming Energy Saving in Household' (Hereinafter referred as 'LBI Project'). Short questions and answers from peer reviewers were respectively followed after the introduction of each project. After a short break, Dr. Tomohiro SHISHIME, Deputy Director General of KRC, briefed the ongoing research activities at KRC in the 5th phase in order to help the understanding of the linkages between these studies and what have been done in the last phase.

The following was interactive discussions of peer reviewers, KRC researchers and other attendees regarding the research methodologies, activities and main findings of the reviewed projects. Based on the discussions, we peer reviewers raised our comments, generally positive, on the BE

project in the 4th phase and proposed suggestions on how to draw the experiences to improve the quality of ongoing studies.

Due to the time limit for preparing an integrative report, we reviewers agreed to confirm of our comments and suggestions again after the meeting. Finally, Prof. HAMANAKA expressed his sincere appreciations to all participants and closed the meeting.

3. Main issues of the BE project in the 4th phase

In terms of CEM project, various empirical studies have been carried out and provided in-depth analyses of proactive policies and business strategies for strengthening CEM in the three target developing countries, China, India and Thailand. This project focused on the third wave of environmental policy, environmental information disclosure (EID) strategy, and an emerging CEM initiative, green supply chain management (GSCM). In close collaboration with local research partners, the research activities has involved in comprehensive country overviews of CEM policies, a range of informal consultations with related experts, field works like questionnaire and interview surveys to the companies and their related stakeholders, and econometric practices for policy analyses. This project generated fruitful outputs including several interim country reports and a finalized integrative research report, six peer-reviewed articles published in internationally famous journals, five conference papers presented in internationally or Japan domestically academic meetings, and proceedings of international seminars and symposiums arranged by KRC. The project publications are believed to help close research gaps of CEM policies in developing Asia and raise further discussions on EID policy and GSCM strategy. The impact on ongoing policy progress can be observed from the retrospective assessment of a mandatory EID program implemented in China. Several provincial governments, under which the study area is located, have agreed to modify and integrate this program for enhancing its functions for better CEM.

Regarding the LBI project, the diagnosis software was developed and used to identify the sources and amount of CO₂ emission in household. The software helps people to understand the appropriate measures to reduce their energy use and CO₂ emissions. The project conducted pilot study toward CO₂ emission reduction at households to review the effects of innovative policy proposal at local level. This research generated a research report summarizing the pilot study and two conference papers presented at KRC's symposium and an external meeting. The research activities attracted the concerns from the media and were disseminated in Newspaper and NHK broadcasting.

4. Comments and recommendations from peer reviewers

4.1 Comments and recommendations on CEM project

The comments and recommendations on CEM projects from peer reviewers are concluded as follows:

- 1) The project design is very clear based on good understanding of local situations and policy needs in the target countries.
- 2) The strategic research activities under the project have good policy relevance and keep in line with mission of IGES.
- 3) The final research report is quite impressive. The fruitful journal publications based on the case studies in China significantly contribute to the academic debates and discussions in related topics.
- 4) The project strategically picked up EID as one of research focuses. Actually, corporate EID is very important for Asian developing countries as it could work as an effective tool for improving CEM with lower management cost. EID may provide another platform for networking the companies and their related stakeholders. More participations of the public due to EID would provide both incentives and pressures to the companies with different environmental performances. This strategy may facilitate CEM policy from the existing regulation dominated model to a policy mix with high necessary.
- 5) The research findings on EID are interesting. However, following study activities with relevance are necessary to make the project more outstanding. As examples, comparisons of the status of EID and corresponding reasons in the three countries are meaningful and would generate more evidences for policy suggestions. Definition of the minimum of EID in quantity and quality would guarantee accurate understanding of related stakeholders to company's environmental behaviors and therefore enhance the policy functions. Information disclosure of carbon emissions and energy use of companies and how to encourage the disclosure of small and medium enterprises (SMEs) would be additional topics for research.
- 6) Regarding the study of GSCM, the influence of multi-national companies (MNCs) to SMEs bears further research in the future. It is also necessary to monitor the improvement of information, material and management experiences sharing between the supply chain members through GSCM practices.
- 7) It is hopefully to give specific attention to the impact of foreign direct investment (FDI) on CEM in developing Asian countries as an interesting research topic in the future.
- 8) In overall, the case studies in the three countries could not be integrated well in terms of methodologies and survey contents. This affected the comparison of research findings among target countries. The 5th phase project should learn lessons on this point.
- 9) Nearly all the research components suggest the importance of capacity building of companies. However, the aspects for capacity building are not clearly identified. Besides providing financial and technical supports and environmental training of employees, top management shall be discussed as another important internal factor for improving CEM.
- 10) It is understandable that more time is needed to observe the success of research outputs in influencing policy progress. However, following outreach activities are strongly recommended to touch related people like policy makers, business executives and even international communities.
- 11) It would be useful to summarize Japanese experience in term of CEM improvement during 1960s and 1970s as it could be learned by the emerging countries. Environmental overview of

Japan conducted by OECD and related studies of World Bank in 1990s would provide background information of Japanese case.

4.2 Comments and recommendations on LBI project

- 1) The activities under LBI project are very impressive. The research has close policy relevance which is good in line with IGES mission.
- 2) The project impact to policy process is good. It was recognized as main activities of Japan Center for Climate Change Actions (JCCCA) in 2010. And Eco-home diagnosis has been included into 'New growth strategy' of Japanese government.
- 3) Further efforts are needed to strategically influence the stakeholders of KRC, such as Hyogo Prefecture Government and Ministry of Environment, Japan, in expanding the application of the tool developed by the project.
- 4) It is highly encouraged to conduct some pilot studies in some areas abroad in Asia to test the feasibility and possibility of the tool's diffusion there.

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Annex:

Agenda of the Peer-review Meeting

Date: 2 September, 2010

Venue: IGES Kansai Research Centre

East Building 4th Floor, Disaster Reduction and Human Renovation Institution,
1-5-2, Kaigan-dori, Waki-no-hama, Chuo-ku, Kobe, Hyogo, 651-0073 Japan
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Project reviewed: The Business and Environment Project

Reviewers: Prof. Shiqiu ZHANG, Deputy Dean, Professor, College of Environmental Science and Engineering, Peking University (Chair of the peer-review)
Prof. Kazuo MATSUSHITA, Graduate School of Global Environmental Studies, Kyoto University

IGES attendees: Hironori HAMANAKA, Chair of IGES; Yutaka SUZUKI, Director General; Tetsuro FUJITSUKA, Senior Adviser; Tomohiro SHISHIME, Deputy Director General; Xianbing LIU, Senior Policy Researcher; Hiroo IINO, Senior Policy Researcher; Yuki SHIGA, Researcher; Abdessalem RABHI, Associate Researcher; Kazunori OGISU, Associate Researcher

Schedule:

13:00 Greetings from the Chair of IGES
13:05-13:10 Introduction of KRC by Suzuki
13:10 -15:10 Presentations of the project (by KRC researchers including Q & A)
-Corporate Environmental Management Project (by Liu, Shiga and Rabhi, 60 minutes)
-Local Business Initiatives Project (by Iino, 30 minutes)
*15-minute Q &A after each project
15:10-15:25 Break
15:25-15:40 Explanation of the 5th phase research project plan (By Shishime)
15:40-17:10 Q&A Session and discussions
17:10-17:40 Break (Preparing reports with reviewers)
17:40-17:55 Comments from the reviewers
17:55 Closing Remarks by the Chair of IGES
19:00 Reception