

Department of Tropical Agriculture and International Cooperation  
National Pingtung University of Science and Technology

## Conference Attendance Report

1<sup>st</sup> Congress of East Asian Association of Environmental  
and Resource Economics

Venue and Date:

Hokkaido University, Sapporo, Japan, August 18-20, 2010

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## **1 Introduction**

This report contains the main activities I did during my participation, as presenter, in the *1<sup>st</sup> Congress of East Asian Association of Environmental and Resource Economics*, (EAAERE) developed in Hokkaido University, Sapporo, Japan, on August 18 to 20, 2010.

The EAAERE 2010 Congress had three main activities: (1) keynote speakers, (2) paper presentations, and (3) field trip. The keynote speakers were from England, Germany, and Japan. The presenters were mainly from Japan, Taiwan, Singapore, and South Korea, and the field trip was to Furano, a lavender, onion and rice area production in Hokkaido.

The Congress was divided in 14 sessions related to Environmental and Resource Economics. The total number of papers presented in the 14 sessions was 74. Our paper, entitled, “Sites for Biomass Plants in Taiwan” was scheduled in Session 4 Energy-renewable, which I successfully presented on August 18, 2010.

In this report, I describe my participation in the Congress and give details about the valuable information I obtained from it.

## 2 Objective of my Participation to the 1<sup>st</sup> Congress of EAAERE 2010

Attending and presenting the paper, “Sites for Biomass Plants in Taiwan,” in the 1<sup>st</sup> Congress of East Asian Association of Environmental and Resource Economics (EAAERE 2010) in Hokkaido, Japan on August 17 – 19 had five objectives:

1. Present a research paper in an international conference
2. Interact with professors and scientists working in my same research area
3. Get first-hand information from other research presentations
4. Start creating a network with professional working in the same field as I.
5. Visit Japan

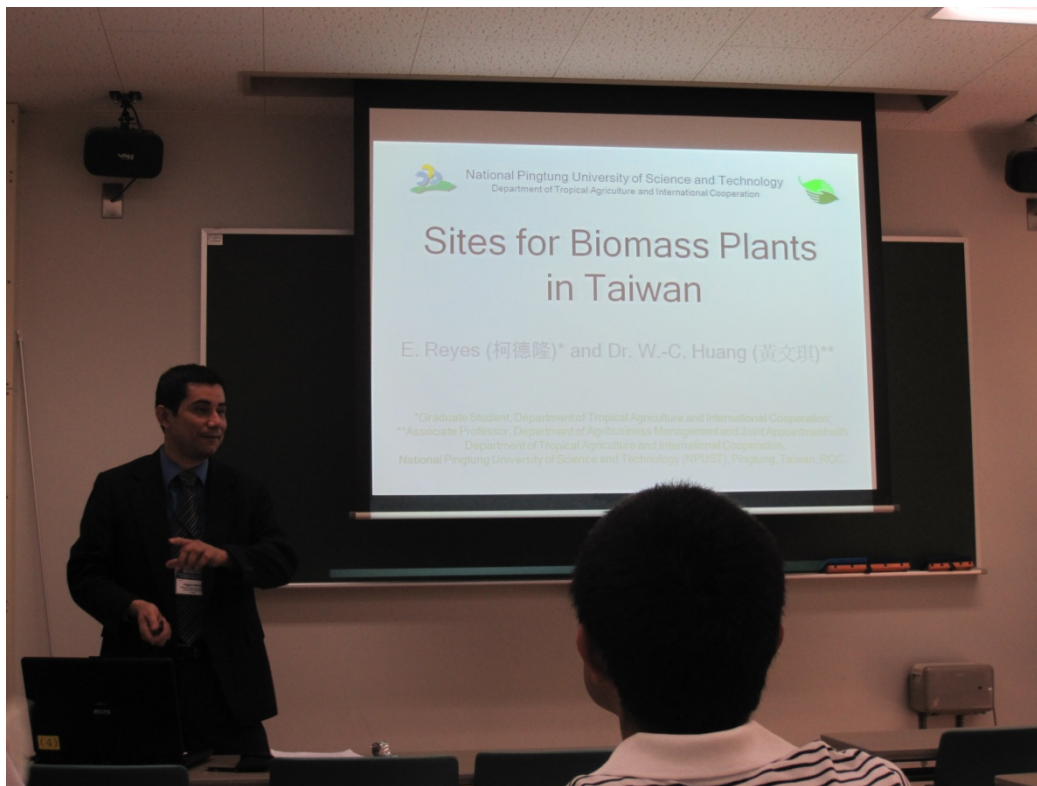


Figure 1. Presening, “Sites for Biomass Plants in Taiwan,” in Hokkaido University

### 3 Main Conferences Activities

The main conference activities of EAAERE 2010 were the following: keynote presentations, parallel session of paper presentation, General Assembly of EAAERE Association, welcome dinner, and field trip to lavender, onion, rice, and agrotourism sites. Table 1 describes the activities carried out during the conference .

Table 1. Timetable of main activities developed during the EAAERE 2010, Hokkaido University, August 18 – 20 , 2010

Activity	Aug 17	Aug 18	Aug19	Aug 20	Aug 21
Travel and Accommodation					
Keynote speakers					
Parallel Session of Paper Presentation					
General Assembly of EAAERE Association					
Field trip to Furano, Hokkaido					
Return to Taiwan					

#### 3.1 Keynote Speakers

The conference had three distinguish keynote speakers: Prof. Paul Ekins, from University College London, England; Prof. Martin Janicke, from Freie University Berlin, Germany; and Prof. Takamitsu Sawa, from Shiga University, Japan. Their keynote presentations were about green taxation, experiences on fiscal reform in developed countries, and strategies necessary to implemented a low-carbon society (Figure 2).



Prof. Paul Ekins  
University College  
London, England



Prof. Martin Janicke  
Freie University Berlin,  
Germany



Prof. Takamitsu Sawa,  
Shiga University, Japan

Figure 2. Keynote speakers in EAAERE 2010 Congress in Hokkaido University.

Prof. Paul Ekins delivered a speech on “Environmental Tax Reform: Cost-Effective Route to a Low-Carbon Economy.” In his speech he highlighted the importance to reduce CO<sub>2</sub> emissions to diminish the climate change challenges. Also, he mention the rationale of pushing environmental taxation, which includes:

- Market failure leading to excessive pollution and environmental destruction
- More efficient than regulation; more effective than voluntary agreements and information.

He mentioned that energy has shown the following characteristics, when analyzing the potential of taxing it:

- Energy demand increase with income, with an income elasticity of +0.5

- Energy demand decreases with price, with an elasticity of 0.6
- Energy has demonstrated some market failures efficiency technologies
- Improvements in energy efficiency lead to a rebound effect, and therefore save less energy than anticipated (up to 70%)
- Humans are extremely ingenious at finding new ways to use energy (heating drives, gardens, making artificial snow, etc)

On the other hand, taxing carbon has the following features:

- Rich countries must achieve a minimum of 80% decarbonisation by 2050
- Only carbon pricing (taxing or trading) will stimulate the uptake and development of existing low-carbon and efficiency technologies, and reduction in the demand for carbon-based fuels.

In conclusion, Prof. Ekins said that without environmental taxation, the macroeconomic cost of environmental improvement will be higher than it needs to be. Without significant increases in energy prices, energy consumption will go on rising. Finally, carbon-based energy will lead to increased carbon emission and a failure to stabilize the climate.

Prof. Martin Janicke, from Freie University Berlin, did a presentation on “German Experience on Tax and Fiscal Reform.” In his presentation he focused to the general aspects of green taxation, and the improvements resources needed to install a green taxation. He also mention that eco-taxation is a highly plausible instrument

to introduce, but not easy to do so. In many cases, green taxes, are restricted by concerns of income distribution and competitiveness. To avoid criticism Germany's eco-tax (US\$18 billion revenue) is mainly used to reduce social security cost of labor. Also, this tax has created 250,000 new jobs since 1990. The main employment effect was in the construction sector of green investment. This is a good example for Taiwan that is also looking to establish a green economy. In 2008, environmental taxes in Germany were equivalent to 2.4% of its GDP.

The last keynote speaker, Prof. Takamitsu Sawa, the president of Shiga University, explained what Japan is doing to achieve the 1997 Kyoto Protocol. Purchasing greenhouse gases from Hungary, Russia and other developing countries. Also, he mentioned why the United States withdraw from the Kyoto Protocol and showed the flaws that the Bush's administration used to justify not being a signatory of the Kyoto Protocol. He mentioned that Japanese enterprises are moving forward to develop more eco-friendly technology. In addition, he stressed that the only way to tap the global warming and reduced, substantially, the greenhouse gases emission is throughout worldwide cooperation.

Keynote speakers had one hour to deliver their presentation. During their presentation, the Question and Answers (Q&A) sections were the most challenging for each of the speakers, where professors, especially, from Taiwan and South



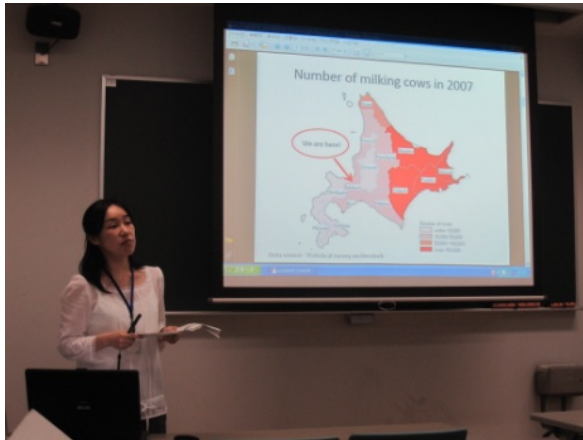
Korea, questioned relentlessly about green taxes, cap and trade, and policies and programs for low-carbon development societies.

### 3.2 Sections Presentation

The Congress was organized in sessions. Each session consisted in several presenters, one moderator and one time-keeper. There were 14 sessions, in which 74 papers were presented in total. Table 2 shows the distribution of papers per session. I presented my paper, “Sites for Biomass Plants in Taiwan,” in Session 4. Energy-renewable. I had 20 minutes to deliver my presentation, 5 minutes for Q&A, and 5 minutes more for my discussant to present the contribution, findings suggestions to my paper. My reviewer was a Japanese professor named, Tatsuo Suwa, from Hokkaido University.

Table 2. EAAERE 2010 sessions and paper presentation per session

Session	Number of paper resented
Environmental fiscal mechanism	11
Natural resource management	4
Environmental valuation	4
Energy-renewable	4
Economic theory of the environment	4
Economic valuation	4
Emission trading	7
Environmental tax	4
Circular economy	9
Environmental instruments	4
Water and cost of degradation	4
Economic instruments	6
Climate change mitigation	3
Energy-non-renewable	6
<b>Total</b>	<b>74</b>



a



b



c



d

Figure 2. Japanese fellow PhDs (a, b), Taiwanese professor (c), and me, Edgardo Reyes, presenting our papers in different EAAERE 2010 sessions.

After the incorporating the suggestion made to my manuscript, I will submit the paper, “Sites for Biomass Plants in Taiwan,” for publication to the *Journal of Environment Economics and Policy Study*. The most important suggestion from the reviewer of our paper, was to do use different scenario analysis, with other biofuel targets, in the modeling

During the conference, I also had the role of discussant for a paper presented by a Japanese Postdoctoral Fellow, Nobuko Yabe (Figure 2a).

### **3.3 Attending Presentations**

Due to the parallel sessions, it was not possible to attend all the presentations, but I attended those more related to my research topic: bioenergy, biofuels and recycling.

The first session I attended was Session 4, Energy-Renewable. There I learned how to develop an economy analysis when a new energy technology is introduced in a region, simulating energy consumption and supply. I also learned how to analyze, from the environmental point of view, a new energy technology using the Life Cycle Assessment. All the presentation in this session showed me how lowering carbon emission, is currently, a central issue, especially for Japan.

Session 10, about Circular Economy attracted my attention, the presentations were the following: (1) recycling, trade on recyclable wastes and tariffs, (2) global reuse and optimal waste policy, (3) recycling of waste and downgrading of secondary resources in a linear production economy. These were all theoretical studies. The session helped me to understand the difference between a theoretical and empirical research. In Session 14, also about Circular economy, was presented and interesting case studies comparison about waste management in Japan, Taiwan and China. I was especially interested in learning how Japan manages its waste. From Taiwan, an associate research fellow, Dr. Chung-Hsu Lin, from Chung-Hua Institution for Economic Research (中華經濟研究院) did an excellent presentation about recycling systems in Taiwan, Japan, South Korea, and China.

### 3.4 Field Trip

On August 20, 2010, the EAAERE 2010 organizers took as Furano, Hokkaido.

During the trip, I visited lavender, onion and rice production fields. In addition, we went to Asahiyama zoo and handicraft tourism spots (Table 3). Figure 3 shows some pictures of the most relevant places I visited.

Table 3. Field trip schedule to Furano, Hokkaido on August 20, 2010

Excursion		EAAERE2010
<b>Biei &amp; Furano Course</b>		
(1) Scheduled day of excursion: Friday 20th August 2010 (day trip)		
(2) Condition of excursion: Requires a minimum of 20 applicants		
(3) Fee (per person): JPY 10,500		
07:30	Depart from Sapporo Aspen Hotel	
07:35	Depart from Best Western Fino Sapporo	
10:00	Arrive at Furano Ningle Terrace for shopping	
10:45	Depart from Furano Ningle Terrace	
10:50	Arrive at the Furano Cheese Workshop for a factory tour	
11:30	Depart from the Furano Cheese Workshop	
12:00	Arrive at Franoble Matsuo for a Jingiskan (grilled lamb dish) lunch (inc. melon jelly)	
13:00	Depart from Franoble Matsuo	
13:00	Drive through the patchwork hills of Biei (stopping for a rest at an observatory en-route)	
14:30	Depart from Biei's patchwork hills	
15:20	Arrive at Asahikawa's Asahiyama Zoo	
17:15	Depart from Asahikawa's Asahiyama Zoo	
18:15	Arrive at the Sunagawa Highway Oasis service area for a rest and to shop for Hokkaido sweets	
18:40	Depart from Sunagawa Highway Oasis service area	
19:55	Arrive back at Best Western Fino Sapporo	
20:00	Arrive back at Sapporo Aspen Hotel	





a



b



c



d



e



f

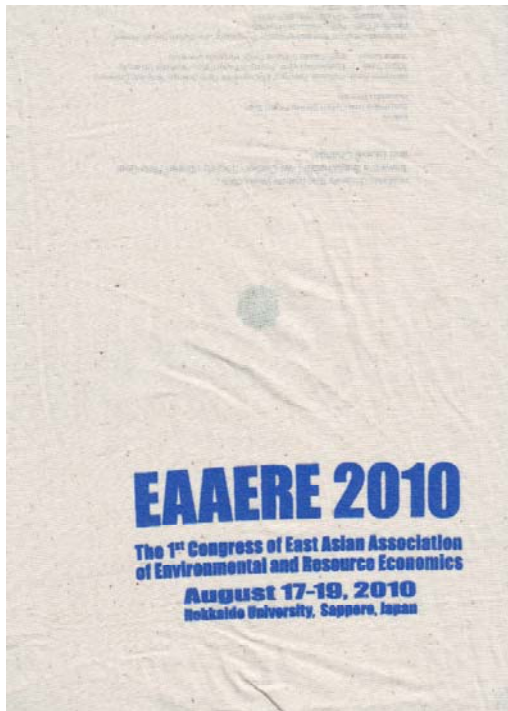
Figure 3. Places visited during the field trip in Furano (a) Paddy rice; (b) onion fields; (c) lavender field, up in the hill, (d) flower beddings with Congress's participants, (e) planting lavender, and (f) handicraft tourism area.

#### **4 Literature Received in the Congress**

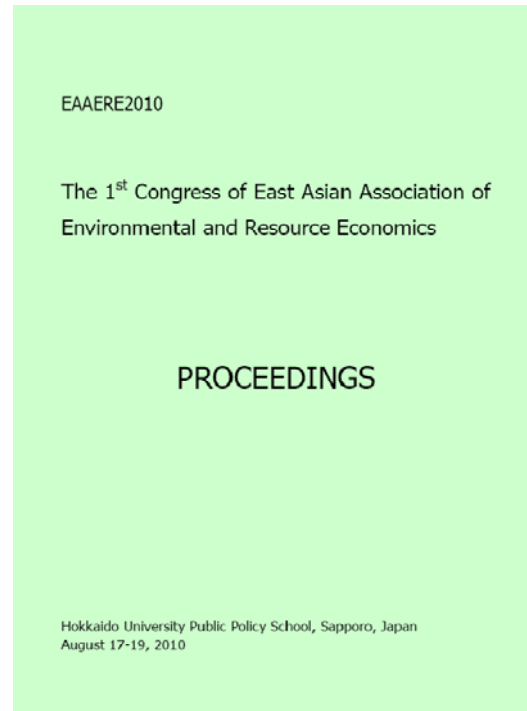
As registered participant, I received a bag containing the following literature material: a CD with the conference proceedings files; a handbook program with abstracts' presentations; a book edited by one of the conference organizers, Prof. Fumikazu Yoshida; and a compilation of papers presented in November 2009, in an international symposium entitled, "Toward a sustainable Low Carbon Society-Green New Deal and Global Change" (Figure 3).

The "Sustainable Low-Carbon Society" book, was edited in 2010 by Fumikazu Yoshida and Motoyoshi Ikeda. The book has 13 chapters and was written to inform about the current global environmental crisis. The book puts the contents and achievements of the G8 "Sustainability Weeks" held in Hokkaido University. Its contents gives a comprehensively conceive explanation of the causes of global environmental deterioration, primary global warming, in terms of both the natural and social sciences, and, with their aim set on building a sustainable low-carbon society, thinking from the perspective of countering and mitigating global environmental deterioration (Figure 3c).

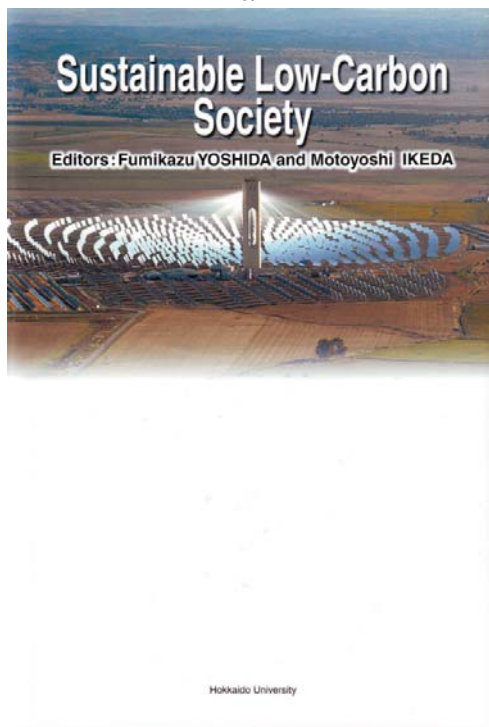
The recompilation of papers on the international symposium, "Toward a Sustainable Low Carbon Society-Green New Deal and Global Change," contains the latest educational and research developments in Hokkaido University toward a sustainable society (Figure 3d).



a



b



c



d

Figure 3. Resources and literature received in the EAAERE 2010 congress. (a) bag, (b) Conference Proceedings, (c) book published by the organizers, (d) 2009 Proceeding on low-carbon society-green new deal and global change.



## 5 Other Activities Developed During the Conference

### 5.1 Welcome Dinner and Networking

The Congress welcome dinner was on August 18, 2010. During the dinner, I had the opportunity to interact and extend my professional network with many Taiwanese, Japanese, Korean, and other East Asian Countries economist and professors. I took pictures with many prominent Taiwanese, and Japanese professors (see figure 4.) In appendix C, I also give a sample of some business card I received during the welcome dinner and throughout the Congress.



Figure 4. With Prof. Chung-Huang Huang (Taiwanese professor friend on my Advisor, Dr. Huang, Wen-Chi)



## **5.2 General Assembly and Election of Board Members of EAAERE**

### **5.2.1 Introduction about EAAERE**

Jointly sponsored by experts from East Asian countries and region including Japan, South Korea, and mainland China and Taiwan, the East Asian Association for Environment and Resource Economists (EAAERE) was established aiming at promoting the research and development of environment and resource economics in Asia, conducting broad academic exchange in the field of environment and resource economics, and facilitating the dialogue with organizations of environmental and resource economics in other parts of the world. The EAAERE's secretariat is located at the Institute of Earth Environment, Kyoto University, Japan. Currently, more than 120 members are registered in the Association.

### **5.2.2 The General Assembly**

During the Conference, I was invited to participate in the General Assembly of EAAERE. The agenda approved and covered was the following:

(1) Statute; (2) Board of Directors and Auditors; (3) Activities in the Fiscal Year 2010/11; (4) Memberships and dues; (5) Budget; (6) Next Congress; (7) In-between congress symposium; and (8) Others.

It was agreed that next in-between conference will be in Cambodia in June 2011 and the 2<sup>nd</sup> Congress of EAAERE will be held in Indonesia, Bali in January 2012.

## 6 Cost of my Participation in the Congress

The total cost of my participation in the *1<sup>st</sup> Congress of EAAERE 2010* was 50 thousand NTD. Table 3 contains cost details of my participation. The main costs were in conference's registration, transportation and lodging.

Table 3. Cost of participating in the *1<sup>st</sup> Congress of EAAERE 2010* in Hokkaido University, Sapporo, Hokkaido, Japan (August 18 – 21, 2010)

Item	Individual cost (NT\$)	Units purchased	Total cost (NT\$)
Conference Registration	7,285.36	1	7,285.36
Bus ticket from NPUST to Pingtung	46.00	1	46.00
Bus ticket from Pingtung to Taoyuan Intl. airport	470.00	1	470.00
Airplane ticket (round-ticket Taipei–Sapporo)	18,900.00	1	18,900.00
MRT from Sapporo Airport to Aspen Hotel	378.84	2	757.68
Hotel (Four-night stay in Aspen Hotel, Sapporo)	4,189.08	4	16,756.33
Field trip to Furano, Hokkaido	3,824.81	1	3,842.81
Shuttle from Taoyuan Intl. Airport to THSR Station	30.00	1	30.00
Taiwan High Speed Rail from Taoyuan to Zuoying	1,330.00	1	1,330.00
Local Train from Zuoying to Pingtung	44.00	1	44.00
Taxi fare from Pingtung to NPUST (Midnight)	500.00	1	500.00
<b>Total</b>			<b>49,962.18</b>

Note: Exchange rate (July 10, 2010)

1 US\$ = 88.4047 Yen

1 US\$ = 32.203 NT\$



Figure 4.  
Picture taken in passengers-waiting area at Chitose International Airport, Hokkaido, Japan (August 21, 2010)

## 7 Acknowledgments

Presenting the paper, “Sites for Biomass Plants in Taiwan,” in Hokkaido University at the *1<sup>st</sup> congress of East Asian Association of Environmental and Natural Resource Economics*, was possible due to the direct economical support of National Pingtung University of Science and Technology.

In addition, completing the entire paper work and application’s requirement was possible because of the valuable help from the staff of the Department of Tropical Agriculture and International Cooperation; I also want to extend my gratitude to my scholarship sponsor, Taiwan’s International Cooperation and Development Fund.

Special thanks go to my advisor, Dr. Huang Wen-Chi, for her intellectual support and encouragement.

To all of them, thank you.



## 8 Appendices

### Appendix A. Location of Hokkaido University, Sapporo, Japan



# Appendix B. Hokkaido University Map and Congress Location





## Appendix C. Sample of Business Cards Received During the Congress

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