

INTERNATIONAL CENTER FOR ENVIRONMENTAL TECHNOLOGY TRANSFER



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MESSAGE from the EXECUTIVE DIRECTOR

On the occasion of the 61st issue of the ICETT newsletter

It has been 24 years, since the establishment of the International Center for Environmental Technology Transfer, ICETT, and this issue of the newsletter will be the 61st of its publication. Throughout these years, ICETT has been promoting the transfer of industrial pollution control technologies by accepting participants in various fields from a number of developing countries and then further developing their skills and capacities. We have also contributed to conserving the global, living, and natural environment and to overcoming environmental issues through research and technology jointly developed with various enterprises.

However, in recent years, ICETT has been changing its business in accordance with the diversification of environmental issues, such as countermeasures against global warming, cyclical use of resources, and the conservation of biodiversity. Along with activities conducted so far, ICETT has implemented further projects relating to Climate Technology Initiative (CTI), which promotes transfer of climate change mitigation technology and supports the environmental business of small and medium-sized enterprises (SMEs). In these projects, ICETT staff, together with experts, visit sites in overseas countries, identify problems, and present solution options. They also aim to match the local environmental requirements and needs of enterprises in Japan.

Based on our newly drafted medium-term management plan for the period FY2014 to FY2018, we are aiming to focus more on projects to improve the living environment, including waste management, such as the promotion of the “Reduce, Reuse, and Recycle” initiative for waste and global warming prevention projects.

It is important for ICETT to develop projects based on the ICETT’s fundamental principles, as it adapts to the surrounding physical environment. ICETT will continue with public bidding projects, as previously, but will also positively involve itself in the development of new projects, working in close partnership with a range of stakeholders. For example, not only will it wait for public-bidding from municipal, prefectoral, and national government offices and related institutions, but will aim to comprehend the activities of institutions and their directions, and propose new project plans in a proactive manner in cooperation with entrusters.

ICETT will thus implement environmental conservation projects in a proactive manner by looking ahead to the trends and environmental needs and play a significant role in environmental conservation and the sustainable development of the global economy.

Kiyoshi Minami

ICETT Projects and Results for FY2013

In order to deal with environmental issues in Japan and overseas, ICETT implements a variety of conservation activities, and carries out effective environmental technology transfers, appropriate to the nature and conditions of each country. In FY2013, in addition to training projects, we held business meetings in Taiwan and in Thailand between local enterprises and Japanese companies interested in environmental business. Moreover, as one of our international cooperation projects, ICETT continues work to encourage investments in global warming mitigation projects. An outline of ICETT projects in FY2013 is provided below.

WORKSHOP AND TRAINING:

ICETT implemented environmental training courses in Japan, such as those commissioned by JICA, Mie Prefecture, and Yokkaichi City governments, etc., and accepted government officials, researchers, and engineers as training participants from 11 countries, including the People's Republic of China (PRC), Indonesia, and countries in Central and South America.

These training courses covered comprehensive waste management, industrial pollution control technologies, environmental impact assessment, and awareness-raising, among others. Through such training courses, ICETT aims at technology transfer and human resource development towards the establishment of a sustainable socio-economic system.

RESEARCH AND ANALYSIS:

ICETT conducted comprehensive research projects on the current status of environmental conservation in Japan and overseas countries to identify problems and make proposals or give advice on future countermeasures. In addition, further training, seminars, and information provision will be implemented in future. In FY2013, ICETT set up business meetings between local companies and Japanese companies in Taiwan and Thailand.

INTERNATIONAL COOPERATION:

ICETT held an international conference on global environmental conservation, environmental project promotion and an international forum. In addition, ICETT conducted an international exchange project in which senior high school students in Japan, PRC, and the USA learned about environmental conservation.

INFORMATION DISSEMINATION AND AWARENESS-RAISING:

ICETT disseminated information utilizing its website and an e-mail newsletter. ICETT also took part in a number of environmental exhibitions.

Indonesia Urban Environmental Management Course

Outline

This Training Program for Young Leaders features a 14-day training period from June 18 in which 15 persons aged 35 or younger from the Indonesian central and regional governments and private companies in charge of waste management participated. The aim was to help them to understand the Japanese government's environmental administration, local governments' environmental management methods, and Japan's related experience and technologies, such as environmental education, aiming to use such knowledge as a reference for their own country's environmental improvement.

Background and purposes

In the Republic of Indonesia, the amount of waste has been increasing year on year along with economic growth, the amount of waste generated per person per day is expected to reach 0.91 kg by 2020. Especially in large cities, although the government's waste transport and collection rates are on an increase, they are still low. Collected waste is disposed through sanitary land-fills through an open dumping system. Furthermore, environmental pollution caused by waste unlawfully dumped into rivers and lakes has become a major problem. By raising awareness of local governments' functions for proper waste management in Indonesia, and promoting recognition and awareness of responsibilities by local government officials and persons in charge of waste management, this training focused on the enhancement of participants' capabilities.

Training content

After the basic orientation, training was conducted under three main themes: 1) Japan's management systems for waste management, such as legislative systems, administrative framework, and ordinances; 2) introduction to disposal systems, especially organic waste disposal techniques; 3) raising local residents' awareness, environmental education, recognition of the role as government officials.

1) Japan's management systems for waste management, such as legislative systems, administrative framework, and ordinances

With regard to the transition of Japan's environmental administration and waste disposal, trainees learned about Japan's policies and Recycling Law, as well as the management systems of waste in general in the national and local governments, and explored the direction of solving the problems that trainees are currently facing.



Study tour at a disposal facility
in Nagoya City

2) Introduction to disposal systems, especially organic waste disposal techniques

Under this theme, participants learned about various methods known as the "3Rs" toward a recycling society, and concrete efforts in 3R initiatives; and confirmed the systems and methods of resource recovery and recycling automobiles used in the tourism industry based on the Recycling Law. Furthermore, they learned about composting methods for organic waste that accounts for 60% of general waste in Indonesia, especially home-based methods that are closely related.

3) Raising local residents' awareness, environmental education, recognition of the role as an administrator

Participants visited the sites of environmental volunteer activities by citizens and sites of environmental education at elementary schools, and learned the methods that have been utilized there. In their meetings with Japanese local government officials, participants discussed and deepened their understanding of the importance, direction, and successful examples of awareness-raising and environmental education.

In this Training Program for Young Leaders, which also aimed to deepen understanding and forge friendly relationship between both countries, during their stay in Japan, trainees actively tried Japanese foods; experienced tea ceremony at Shisui-an, a tea house in Yokkaichi City; and enjoyed a photo session at ICETT, wearing kimono.

In conclusion

In this training program, we were impressed by the training participants actively asking questions and having discussions in order to understand their own countries' or regions' waste



Kimono photo shoot

management stages through this program and through their interactions with each other, and to learn from related cases in Japan about what they should improve in the future. In conclusion, we would like to express our sincere appreciation to all the people who gave us a warm reception. (Tomoko Uchida, Akiko Kise, Shinji Ideta)

Yokkaichi City's entrusted project

Seminar in Tianjin

Outline

Yokkaichi City and Tianjin City in the People's Republic of China have continued their exchanges in various fields since they established a friendship city relationship in 1980. As part of their exchanges, Yokkaichi city has conducted a training program intended to help resolve various environmental problems in Tianjin City upon entrustment to ICETT since 1993. In this training program, 108 people have visited Japan to date and received training (594 people have received training at local seminars in Tianjin City.) In this fiscal year, under the theme "Environmental Impact Assessment" continued from the previous fiscal year, a seminar was held in Tianjin City, and training in Yokkaichi City.

■ Environmental Preservation Seminar was held in Tianjin City

Before the training in Yokkaichi City, upon request from Tianjin City, and under the principal theme, "Theory and Practice of Environmental Assessment" covering sub-themes of "measures to reduce agricultural waste" and "technologies to restore ocean ecosystem," a local seminar was held for two days from October 17 and 18, 2013.

In the local seminar, the latest theories and cases were introduced from both sides on the presupposition of various differences of social systems, cultures, and customs between Japan and China, and related opinions were actively exchanged.



A local seminar

■ Details and results of training in Japan

The training in Japan was held for 16 days from November 4 to 19 at venues such as ICETT, welcoming four officials and staff members who visited Japan from the Tianjin Environmental Protection Bureau and Tianjin Environmental Impact Assessment Center, under the theme "Environmental Impact Assessment."

After learning about the Yokkaichi pollution problem and Yokkaichi City's environmental administration, participants joined in the "Japan-Korea-China Tripartite EIA Workshop," and learned about the latest knowledge related to environmental assessment through presentations by researchers from Japan, China, and South Korea.

Also, participants attended special lectures by specialists in the Japanese environmental assessment field on Japan's legal system and new methods of strategic environmental assessment and environmental impact assessment.

Furthermore, in the related training they had an opportunity to consider the construction of a waste incineration plant and the environmental impact assessment

of a chemical plant from multilateral and multifaceted perspectives regarding urban development.



Japan-South Korea-China EIA workshop

In addition, with regard to the sub-theme, "environmental impact assessment in the offshore and agricultural sectors," participants learned about the relationships between civil activities and development activities in the study tour at the Fujimae Tidal Flat.

Participants comments about this training include: "I was able to learn and think about the latest information on environmental assessments"; "I was able to recognize that all countries have the same aim for environmental protection and the same assessment standards for related efforts despite the gaps between their environmental assessment systems"; "This program make me think that I had to further raise my own awareness of environmental protection"; "Although I have already engaged in environmental assessment works, I was able to learn about new related technologies and ideas in this training. I want to learn more after returning to my country, and use my knowledge in my work."

In closing, I would like to express my appreciation to all those who cooperated with this training program.
(Shinji Ideta)



Commemorative photo shoot in front of ICETT

JICA Technical Cooperation Project

The project for total emission control of nitrogen oxide in atmosphere in China

Outline

With regard to controlling the total amount of NOx (nitrogen oxide), which is one of the causes of air pollution and a serious problem in China, in the JICA Technical Cooperation Project we aim at capacity-building for human resources through technical, political, and institutional support for the reduction of NOx emissions. Entrusted by JICA, a joint venture that we formed with Suuri Keikaku Co., Ltd. has conducted this project by forming a JICA expert team.

1. Background of the Project

In China, along with the development of economic activities and an increase in the number of automobiles, NOx (nitrogen oxide) emissions continue to increase. Therefore, the 12th Five-Year Plan (2011 – 2015), which added NOx as one of the indexes in the total emissions reduction target of major pollutants, has a target to reduce total emissions in 2010 by 10%.

Based on Japan's experiences in the reduction in NOx, this project has been conducted by the Japanese Government, upon request from the Chinese Government to provide support, in order to promote China's measures to control total NOx emissions.

2. Outline of the project

① Project name:

The project for total emission control of nitrogen oxide in atmosphere in China

② Project aims:

Output I (ICETT's field): The preparation for the introduction of NOx control techniques to facilities will be advanced, and the technical guidelines will be utilized.

Output II (Suuri Keikaku's field): Through implementation of a simulation of air pollutant diffusion, methods to understand the NOx control effect will be improved.

③ Period of the project:

March 2013 – February 2016

④ Major counterparts:

Department of Pollution emission control of the Ministry of Environmental Protection, the People's Republic of China; Environmental Protection Bureau, Xiangtan City, Hunan Province

3. Outline of activities:

Among the activities by a JICA expert team in the first year (March 2013 – March 2014) of the project, ICETT's main activities were as follows:

① Training in Japan

The training in Japan was held from September to October 2013, and provided central and local government officials from China with an opportunity to deepen their

understanding of NOx emissions control technologies and policies in Japan.

② Preparation of technical guidelines related to NOx control

Chinese Academy for Environmental Planning and a JICA expert team are jointly preparing technical guidelines intended to be used when local governments in China give advice to companies on the introduction of technologies to control NOx emissions. In preparation of the technical guidelines, while the JICA expert team summarized technologies to control NOx emissions elsewhere in the world, including in Japan, the Chinese side is preparing technical guidelines that can be used at related sites in China by considering optimal application technologies based on the current situation of measures against NOx and related needs in China. In the first year, the guidelines mainly target cement and steel sintering furnace fields.



Expert meeting toward the preparation of technical guidelines

③ Technical advice to model companies

In Xiangtan City, Hunan Province, the target cities of the first-year project, the JICA expert team gave selected model companies (cement, sintering furnaces for steel, etc.) from the Chinese side technical advice in the preparation of EPC (Engineering design, Procurement, Construction) related to controlling NOx. At the model cement company, the project found that, as a result of the field survey, the company had room to control the generation of NOx by reviewing the operating conditions of the calcination furnace. With regard to the steel sintering furnaces, the project will monitor the NOx emissions status during the process, and will consider the basic requirements for the introduction of technologies to control NOx in the future.

(Masayuki Deguchi)



Field survey at the cement company

Chubu Bureau of Economy, Trade and Industry

FY2013 small and medium-sized businesses Industrial pollution prevention survey “Model verification survey in the measures to expand industrial pollution prevention technologies in the Chubu Region”

Outline

Aiming to create demands of 50 trillion yen in environmental business in general by 2020 and to create employment for 1.4 million people in the “New Growth Strategy” (by Ministry of Economy, Trade and Industry in June 2010), the role of the environmental industry for economic growth is quite large. Moreover, there is a high potential in overseas development of environmental business for developing countries.

To promote environmental business in the Chubu Region, we engaged in concrete measures to develop environmental business in this fiscal year's survey. Under the Chubu Bureau of Economy, Trade and Industry's guidance, we verified how efficient these measures for development are for collaboration among environmental business companies in the Chubu Region, and for the creation of new businesses. (<http://www.chubu.meti.go.jp/kankyo/data/2603report.pdf> in Japanese)

Details of the project

In this project, after implementing an interview survey that included a questionnaire for companies in five prefectures — Aichi, Gifu, Mie, Toyama, and Ishikawa, and possible markets as the foundation, we set up the “Conference to Support the Development of Environmental Business”; held a “Study Sessions for Overseas Development” and “Seminar and Matching Session”; and set up a “Technical Workshop” and a “Market Cultivation Workshop” as measures to promote environmental business in the Chubu Region; and verified the effectiveness of those measures. In addition, we successfully expanded the corporate database of 41 companies, and data concerning technical seed collection of 15 companies.

Outline of the survey results

[Questionnaire]

We distributed the questionnaire to about 930 companies that engage in environmental business in the Chubu Region, and conducted a detailed survey of 183 valid respondent companies in November. Distinctive results are as follows:

- The top of the list of problems and obstacles in the environmental business was related to markets. The major measure to resolve them was to search for partners (40% of the responses were to directly search for markets, and 30% to search for technical support partners).
- With regard to overseas development, problems related to human resources and costs are recognized along with problems related to markets.
- Support required for business development in Japan: Accessible subsidies (40%), information on technologies and needs (30%), identifying and collaborating with partners (more than 25%)

[Interview survey result]

As a result of the interview survey of 10 companies with seeking overseas development, it was confirmed that every company hoped to obtain information and exchange opinions concerning environmental needs mainly in Southeast Asia, support measures by public agencies, and experiences with entering overseas countries.

Meanwhile, as a result of interviews on the intentions and possibilities of collaboration with other companies, for 10 companies which are considered to be potential markets, the responses were divided into two patterns: starting transactions after general screening of the potential partners' transaction results and business conditions, and actively collaborating with seed companies through open innovation. It was confirmed that specialized trading companies appeared to eagerly explore products to deal in, and small and medium-size businesses with seeds had room to enter this field.

Verification of support measures

[Study Sessions for Overseas Development]

Three study sessions on overseas development were held during the project period, inviting external lecturers. Upon prior request, the study

sessions provided information on local needs, the national character and business practices of the relevant local country, and how to utilize related measures. In a relaxed atmosphere, with a mood for information-sharing and opinion exchanges among participating companies beginning to be formed, the importance of continued implementation of the study session was recognized.

[Seminar and Matching Session]

A seminar was held under the theme of market expansion through collaboration between companies. We were able to confirm and verify from the participants' reactions the necessity of providing information related to industry-academia collaboration cases and technical seeds from universities and research institutes, etc.



On the same day, we held a Matching Session from a perspective of purchasing and packaging, welcoming five core participating companies. After the session, participants expressed their satisfaction with the session, but at the same time we confirmed their requests for another matching session related to further technical development and markets and for the necessary related infrastructure development.



[Technical and Market Cultivation Workshops]

While the Technical Workshop was set up under the theme of disclosure of needs by open innovation companies, the Market Cultivation Workshop was offered, under the theme of the proposal of clues for market cultivation based on surveys in Japan and cases of supporting overseas development of environmental business companies by local governments. This enabled an increase in momentum to take action, with matching sessions with open innovation by industry-academia system and large companies, study tours at laboratories, and the establishment of projects related to the export of infrastructural know-how in collaboration with local governments. In consideration of the verification results of these elements, the Chubu Bureau of Economy, Trade and Industry will hold full-fledged workshops. We look forward to the participation of many companies. (Eiichi Masuda)



"Toyota Environmental Activities Grant Program"

Project to support energy saving in India's steel rolling industry

Outline

After receiving the Toyota Environmental Activities Grant, ICETT has engaged in a project to establish a mechanism to implement sustainable and expanding energy-saving improvements based on voluntary efforts by India's steel rolling industry cluster by setting the dissemination of energy-saving in manufacturing process in this cluster as its target, with each local factory and organization acquiring appropriate capabilities, tools, and networks.

Background and purposes

Although India has addressed the challenge of climate change by measures such as improving energy efficiency after becoming the world's third largest producer of greenhouse gases, the main target of those measures has been large companies, while small and medium-size businesses' energy-saving measures have not progressed due to lacks of skills at the sites and for financial reasons.

With ICETT having realized energy-saving improvements with heating furnaces for the rolling industry cluster in the Bhavnagar District in the Gujarat State since 2008, an increasing number of local companies hope for improvement by replacing old equipment with energy-saving-type heating furnaces. To introduce a highly energy-efficient manufacturing process through voluntary efforts in the cluster, mechanisms to provide the necessary technologies and expertise for the improvement and fund-raising mechanisms are needed.



ICETT has promoted activities to disseminate energy-saving in India's rolling industry cluster, including the establishment of a mechanism to implement sustainably expanding energy-saving improvements based on voluntary efforts.

Activities at the local site

In late April in 2013, we visited India together with Japanese specialists and held a workshop for the dissemination of energy-saving improvements that mainly consisted of the "introduction to cases of two rolling plants that engaged in heating furnace improvement works" and "lectures by Japanese experts on rolling technologies" in the Bhavnagar District in the Gujarat State.



In mid September of 2013, we visited India again, together with Japanese specialists, visiting candidate plants to give technical guidance, including rolling processes, and conducted surveys on energy-saving improvement items, such as surveys on present issues and future needs.

In addition, we have established a support system with an eye on not only our counterpart (C/P) but also local engineering companies (LEC) so that we were able to present improvement plans and to provide follow-ups in line with the local situation and to bridge technical gaps between Japan and the local site during our stay.



Future development

In the future, we will select around two model plants for the next project from five candidate plants; support their efforts for improvement; establish a delivery chain for improvement efforts through energy-saving by holding workshops and developing campaign activities in cooperation with local industrial parks and industry federations; and promote the creation of frameworks for energy-saving improvements based on local voluntary efforts. (Eiichi Masuda)

Mie Prefecture

Overseas Development Model Construction Urgent Job Creation Program Project to Support the Development of Water Environment Business in Thailand

Outline

In Thailand, there have long been strong needs for environmental improvement in the water environment field, and various Official Development Assistance (ODA) programs have been conducted over many years. The country is now at the stage of assessing how each company in the country should take their own water environment preservation measures. Against this backdrop, we held business meetings and a field survey in Bangkok, aiming to promote business development by small and medium-size businesses from Mie Prefecture in Thailand's water environment field.

Background and aims

In the trend of global manufacturing centers shifting to Asian countries, despite its industrial wastewater standards, Thailand still has a situation where water environment problems are regarded as major problems in some industries. With people's awareness of the environment growing, social demands for companies to strengthen their environmental preservation efforts have become stricter year by year.

On the other hand, Mie Prefecture has small and medium-size businesses with excellent water treatment technologies. Potential demand for these companies' services and products are considered to be high in Thailand.

However, small and medium-size businesses' independent overseas development is known to face large obstacles, such as finding business partners, understanding related regulations, avoiding risks, and differences in culture and business practices.

Therefore, in this project, a business matching and meeting session was held in Bangkok, Thailand, aiming to support companies in Mie Prefecture by establishing business matching know-how between water environment companies in the prefecture and overseas companies, and to develop this support model in other countries in the future.



Business matching and meeting session

Support Desk, with cooperation from the Thai Board of Investment (BOI), we held a business matching and meeting session between companies from Mie Prefecture and Thai companies at the Bangkok International Trade & Exhibition Center in Thailand on November 21, 2013. Six companies from Mie Prefecture and 10 companies from.

Thailand participated in this session. On November 22, the day after the session, we conducted a tour around two water treatment plants in Bangkok City and in the suburbs, in order to learn about the actual situation of water treatment sites in Thailand.

Details of the project

Participating companies from the Thai side provided a wide range of information, such as the water treatment situation in industrial parks, information on receiving orders for public works in Thailand, and the Thai economy. Also, several business meetings were held that could lead to future concrete business development.

The tour around water treatment facilities seems not only to have let participants strongly recognize environmental problems in Thailand, but also to provide participating companies with a moment to realize business opportunities.

Lastly, we would like to express our sincere appreciation to all those from related companies and organizations who helpfully cooperated with us to implement this project, the first case for ICETT to hold a business meeting event overseas. (Takao Okumura & Hirohito Nakamaru)

Details of the project

Through the introduction from Mie Prefectural ASEAN Business

Interchange Association promotion services

“Environmental Business Seminar and Business Meetings in Taiwan” a subsidy project to bridge industrial cooperation between Japan and Taiwan by the Interchange Association, Japan

Outline

Based on subsidies from the Interchange Association, Japan, we provided an opportunity for business matching (seminar and business meetings) with Taiwanese companies in Taipei City, the Republic of China (Taiwan) to make a foothold for Japanese companies' overseas market development and overseas partner development.

Background and purposes

In November 2012, the Interchange Association (contact on the Japanese side) and the East Asia Relations Commission (contact on the Taiwanese side) signed a “Memorandum on the Strengthening of Cooperation for the Project to Bridge Industrial Cooperation Between Japan and Taiwan” during the Japan-Taiwan Economic Conference, and agreed on industrial cooperation through business-matching events in a wide range of fields, from manufacturing to service sectors, in cooperation with both Japanese and Taiwanese authorities and the private sector, which further contributes to industrial cooperation between Japan and Taiwan.

Against this backdrop, we held a business-matching seminar and business meetings with Taiwanese companies for small and medium-size Japanese businesses with competitive and excellent products and technologies, aiming for mutual understanding, private sector-led active market cultivation, and the promotion of business exchanges between Japan and Taiwan in the environmental field.

* Japan's contact organization for Taiwan was certified by the Ministry of Foreign Affairs and the Ministry of Economy, Trade and Industry of Japan, aiming to carry out practical business with Taiwan, a country with no diplomatic relations with Japan.

Content of the project

Before holding a business matching session, in an advance survey we visited Taipei in July 2013, and had detailed discussion on their needs at various Taiwanese companies. As a result, with our counterpart, the Taiwan-Japan Industrial Collaboration Promotion Office (TJPO)**, we decided to hold a seminar and business meeting session under the themes “Resource Recovery from Sludge Reduction and Waste” and “Effluent Treatment & Soil Cleanup.” We invited Japanese companies through the public relations section of ICETT's official website and by directly visiting the companies.

On November 18, 2013, 12 Japanese companies from the Chubu Region

participated in the Environmental Business Seminar and Meetings held in Taipei, and each held 30-minute business meeting per company after introducing their own strong technologies and products in sectional meetings.

On the day before the business meetings, we held an advance study session regarding information on the Project to Bridge Industrial Cooperation between Japan and Taiwan, cases of collaboration between Japanese and Taiwanese companies, and environmental needs in Taiwan. On the day following the business meetings, participants went on a study tour of joint wastewater treatment equipment and at a resource recycling facility (wastewater treatment) in an industrial park in Taiwan.



Study tour at a wastewater treatment facility in a science park

** Ministry of Economic Affairs in Taiwan (similar to the Ministry of Economy, Trade and Industry): General contact established in March 2011 for industrial collaboration between Taiwan and Japan.

Results and effectiveness

We made an effort to promote Taiwanese companies' participation by placing materials related to technologies and products of related companies, and information on participating Japanese companies on the official website of ICETT before this project. As a result, 38 Taiwanese companies gathered for business meetings, and more than 100 business meetings were held.

After returning to their home countries, each company has continued their business meetings by sending written estimates and product samples to Taiwanese companies. ICETT has provided follow-ups by setting up further individual business meetings in order to meet demands from participating companies.

We expect that this project will serve as a true bridge between Japanese and Taiwanese companies. (Maki Tamura)

CTI Activities at COP19

November 2013 Warsaw, Poland

Outline

The 19th United Nations Climate Change Conference was held in Warsaw, Poland on 11–23 November 2013. At the Conference, the 19th Conference of the Parties (COP19), the 9th Session of the Conference of the Parties serving as a meeting of the Parties to the Kyoto Protocol (CMP9), was held, as well as meetings of three Subsidiary Bodies: Subsidiary Body for Implementation (SBI); Subsidiary Body for Scientific and Technological Advice (SBSTA); and the Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP). Among others, the parties adopted a decision establishing the Warsaw international mechanism on loss and damages. ICETT participated in the Conference as the CTI Programme Secretariat, holding side events and setting up an information booth to facilitate better understanding of its activities.



- International efforts to combat global climate change began in 1992 with the adoption of the United Nations Framework Convention on Climate Change (UNFCCC). This Convention provides an action framework for stabilizing atmospheric concentrations of greenhouse gasses, aiming to avoid “dangerous anthropogenic interference with the climate system.” The UNFCCC went into effect on March 21, 1994, and has been ratified by 194 countries to date.
- The Climate Technology Initiative (CTI), which was established by the International Energy Agency (IEA)/OECD member countries and the European Commission at the 1st Conference of the Parties (COP1) to UNFCCC in 1995, is a multilateral project based on international cooperation. Its mission is to establish an international cooperation framework to facilitate the diffusion of climate-friendly and environmentally sound



CTI Side Event at the Japan Pavilion

technologies and practices in developing countries. In 2003, the CTI was reformed as an Implementing Agreement under the IEA, establishing its international secretariat at ICETT, and further expanding the scope of its activities.

- At the UNFCCC, financing has been one of the major issues under discussion concerning technology transfer, and the CTI has implemented a broad range of cooperative activities in partnership with developing countries and the UNFCCC. In order to contribute to the achievement of the UNFCCC’s technology transfer objectives, the CTI launched the CTI Private Financing Advisory Network (CTI PFAN) program in an effort to secure the financing access indispensable for projects addressing climate change issues. Through public-private partnerships, CTI PFAN has expanded financing opportunities for project developers and entrepreneurs engaged in clean energy, renewable energy, and energy efficiency projects, thereby facilitating technology transfers under the Convention.
- CTI regards the PFAN program as the core of its activities, and at two side events reported on the results, progress, and future prospects of the program. Because CTI PFAN is highly effective in leveraging limited public resources to facilitate private sector financing, CTI plans on enhancing the linkages between CTI PFAN and a new technology transfer mechanism under the UNFCCC, thereby contributing to the technology transfer goals of the Convention.



CTI side Event at the US Center

FY 2013 Project Commissioned by the Ministry of Economy, Trade and Industry

International cooperation project on the global environment

Outline

ICETT organized the "CTI PFAN 4th Asia Forum for Clean Energy Financing (AFCEF-4)," which provided a unique opportunity to match clean energy related project developers in developing countries and interested investors by improving developers' fund raising capacities in cooperation with the Climate Technology Initiative's PFAN program, and other organizations. Furthermore, in a new initiative to promote the formation of clean energy projects, ICETT investigated a possible scheme to run under the CTI Clean Technology Business Network (CTBN) program, which supports business matching and project development.

- In order to prepare clean energy entrepreneurs to take part in the Financing Forum on 28 February 2014, ICETT organized a Project Development and Financing Workshop to enhance developer's project development ability and provided one-on-one coaching by financing professionals. Out of 50 applicant projects (including 3 Japanese projects), ICETT selected the 10 projects listed below to present in front of potential investors at the Financing Forum.

Team/Company Name	Short Project Description	Country
TMB-Energiotechnik	Construction and operation of a biomass power plant using gasification of briquetted biomass	Nepal
VinaForest	Wood pellet factory	Vietnam
Energy Guru Sharper Sun	Concentrating solar thermal solar boiler	India
Tipawat Corporation Limited	Limited Production of biomass feedstock from plantation	Thailand
Onergy (Punam Energy Pvt. Ltd.)	Access to energy for East India	India
Gram Laxmi Biofuel Pvt Ltd	Development and operation of a cookstoves and biomass fuel distribution business	India
Petrovietnam Power Corporation	Hoa Thang 1 wind farm	Vietnam
MJB Renewable Energy Company	Generation of electricity from biogas produced from poultry waste and production of organic fertiliser from biomass / agricultural waste.	Philippines
CleanTech Global Renewables Inc.	Rangas mini-hydro project	Philippines
Invictus Solar Power Pvt Ltd	Invictus 5MW solar project	India

- Through the coaches' guidance on their respective business plans and investor pitches, project developers' presentation skills in front of their audience improved significantly and drew the attention of both judges and investors.

While the CTI PFAN program has successfully supported project developers access to the financing necessary to implement their projects, there are cases where further support is required for project realization.



Financing Forum (AFCEF-4)



Trial in India

- CTI plans on establishing the CTI CTBN program, a support scheme to enable small and medium-sized enterprises in CTI member countries to transfer their advanced technologies to developing countries. It aims to bring more projects to implementation by feeding more clean energy projects into the CTI PFAN program to secure the necessary financing.
- This year, Japanese small and medium-sized enterprises conducted pilot projects in solar and biomass power generation technologies in Asia, which helped shed light on both prospects and issues concerning effective technology transfers.
- Through these pilot projects, we reconfirmed the requirement to identify information on specific technology needs in developing countries and pass such information to technology providers through the most appropriate avenues. We also learned the importance of making proposals that integrate technologies with viable business models that respond to the market of the receiving side.
- Based on the above, we plan on establishing a scheme to provide useful information on technology needs in developing countries to small and medium-sized enterprise in CTI member countries as a part of the CTI CTBN program, and build a network of professionals who can propose appropriate business models that effectively apply related climate change technologies.

Yokkaichi City

INFORMATION DISSEMINATION AND AWARENESS-RAISING

■ Information dissemination was achieved through our website and our e-mail newsletter. ICETT provided a range of information concerning global environmental conservation technology and concepts, as well as ICETT's activities. In addition, ICETT issued a regular Japanese e-mail newsletter 2–3 times per month, with the aim of strengthening the network of information exchange, sharing environmental information, and suggesting environmental protection technologies. Seasonally, ICETT participated in exhibitions and symposiums held at ICETT and at environment-related institutions in Mie Prefecture, Japan. An outline of exhibitions in FY2013 is provided below.

① Mie Kids' Eco Fair 2013, July 20 – 21, held at Suzuka Foothills Research Park;



Mie Kid's Eco Fair 2013

② Yokkaichi City Environmental Symposium, September 29, held at Yokkaichi Cultural Hall;

③ Leading Industries of Mie Exhibition 2013, November 7 – 8, held at Yokkaichi Dome;

④ Mie Environmental Fair 2013, December 1, held at Messe Wing Mie, Japan

■ In FY2013, there were 215 visitors and participants to learn about ICETT's activities. In particular, 52 "senior students" of Yokkaichi Adult Education of "Yokkaichi Citizens College" studied environmental conservation and ICETT's activities.

Column: Yokkaichi Port Authority

As a part of the FY2013 Global Environmental Workshop, high school students from Tiānjīn City, PRC, Long Beach City, USA, and Yokkaichi City, stayed together at ICETT to promote a mutual understanding through discussing shared environmental problems.



Field-study on board the ship,
"Yurikamome" (Seagull)

■ The training courses we provided to participants in Mongolia and Indonesia were introduced by NHK broadcast news. The training courses for Chinese participants, on efforts concerning pollution control in Yokkaichi and PM2.5 were introduced in newspapers and NHK broadcast news. Mr. Minami, Executive Director, featured in a live appearance on a Mie TV programme in December 2013, describing the activities of ICETT.

Editorial Notes:

We have substantially reviewed and expanded the contents of our newsletters. Our aim is to ensure that ICETT's activities are more widely understood and appreciated. We welcome your comments and suggestions for future issues. Public Relations Division