

MINUTES OF

THE 12th TRIPARTITE ROUNDTABLE MEETING

ON THE ENVIRONMENTAL INDUSTRY

Meeting Date : 30th Nov. – 1st Dec., 2012

Meeting Venue : Environment science & technology mansion, Yixing city, Jiangsu province, China

Participants : 25 Chinese delegates, 8 Japanese delegates, 11 Korean delegates

OPENING SESSION

Mrs. JIA Ning, the Director of the China-ASEAN Environmental Cooperation Center (CAEC) of the Ministry of the Environmental Protection (MEP) in China, presided at the meeting.

Mr. FENG Bo, the Director of Division of Environmental Technology of the Ministry of the Environmental Protection (MEP) in China, expressed that the tripartite roundtable meeting on the environmental industry strengthens the relationship, exchange and understanding on the environmental industries and provides bases to establish long-term cooperation in the field of tripartite environmental industry. He also noted that Chinese government pays high attention to the development of environmental industry and has launched many policies to promote it. Although great progress has been made in China, there are still technological disparities compared to the developed countries. He hoped that China can continue strengthening the cooperation with Japan and Korea with the platform of tripartite roundtable meeting, promoting the mutual development of environmental industry. Finally he wished the success of the 12th tripartite roundtable meeting.

Mr. ZHU Xufeng, the Member of CPC Yixing Standing Committee and the Director of Administrative Committee of China Yixing Industrial Park for Environmental Science & Technology, first expressed the significance of the tripartite roundtable meeting hold in Yixing Industrial Park for Environmental Science & Technology. Then he introduced the history and development of environmental industry in Yixing, and the international cooperation between Yixing Industrial Park and other countries. Considering the problems existed in Yixing environmental industry, he emphasized the importance of establishment of governmental cooperation, intellectual property system and non-local enterprise development platform. He hoped that the environmental industry and ecological environment improvement can be accelerated through the international technology transfer. And the Yixing

Industrial Park should realize its role during this process. Finally he wished the success of the 12th tripartite roundtable meeting.

Mr. Koji TSUCHIHASHI, a Researcher of Japanese Ministry of Environment (MOE), made a presentation reviewing the 11th Roundtable meeting.

Session 1: Green Procurement and Environmental Labeling

Chairperson: Ms. JIA Ning, the Director of the China-ASEAN Environmental Cooperation Center (CAEC) of the Ministry of the Environmental Protection (MEP), China

Mr. YANG JAEKWON, a senior researcher of Korea Environmental Industrial & Technology Institute (KEITI), gave a talk on the "Major Achievements of Korea's Green Consumption Policy". He first presented Korea's green consumption policies, involving the eco-labeling scheme, carbon footprint labeling scheme, voluntary green procurement agreement with industry sector, green store designation scheme and green credit card scheme. Next, he explained the green credit card scheme, which is a new policy closely related to daily life. He stated that the implementation of these green consumption policies led to significant increase in the green procurement by public sector and industries and the issuance of green card, leading to an extension of green market. Korea's green procurement policy was also introduced in a UN report. He briefly mentioned the conclusion and hoped that all these experience could be well shared.

Mr. KIM TAESOO, the senior manager of CS Environmental Center of SAMSUNG Electronics co., Ltd., gave a presentation titled "Eco-product development and Eco-labeling". He began with an explanation of the eco-management in Samsung. Then he introduced the eco-product development including the supply chain management, eco-design process for eco-products, eco-rating and Sumsung eco-product line-ups. As for eco-labeling activities, three types of environmental labeling (type , , labeling) were presented. He stated the progress which has been made by Samsung in eco-labeling. Finally, he gave a conclusion on eco-labeling strategy in Samsung and future expectations.

Ms. Ai KAIBU, the Deputy Director of Environment and Economy Division of Japanese MOE, made a presentation on "The Law on Promoting Green Purchasing and the Green Contract Law". She opened with an outline of the law on promoting green purchasing, including the objectives of the law, the structure of the green purchasing, the basic approach to green purchasing, the designated procurement items and evaluation criteria, the example of designated procurement items and its evaluation criteria, and the CO₂ emission reduction results of green

purchasing in public sector. Following this, she presented the green contract law and gave a comparison of the green purchasing law and the green contract law. Contract related to the supply of electricity, procuring and leasing vehicles, the procurement of ships, ESCO (improvement for energy saving) and designing buildings were mentioned in the end.

Mr. Ryotaro FUTAGAMI, the general manager of Canon Inc., presented on the title of “Measures for Canon’s Environmentally Conscious Products”. Firstly, he introduced the corporate profile, main product categories and environmental vision of Canon Inc.. With the worldwide trend of environmental regulation & labels for products, he explained three pillars of Canon’s environmental strategies for products. Typical examples of Canon were also provided to show Canon’s measures for environmental regulation & labels, involving energy conservation, elimination of hazardous substances, resource conservation, Canon environment front-runner model and obtaining environmental labels. Finally, he emphasized the importance of harmonization of environmental label standards and especially asked that national agencies in each country (or third authorized party) could certify products based on comprehensive criteria at one time, in order to further accelerate international dissemination of environmentally conscious products.

Mr. CAO Lei, the Deputy Director of Standard and Policy Research Office of Environmental Certification Center of MEP in China, presented on the “The Development of China Government Green Procurement”. He started with the introduction of China government procurement. As for the part of China government green procurement (GGP), he first introduced the development of GGP program and basic information of GGP. Then he gave a presentation on GGP program of China from many aspects, such as laws support, policies support, pattern of GGP, GGP products groups, development of GGP list, development of GGP website, development of GGP management system and development of GGP newsletter.

Mr. MA Fang, the General Manager of Jiangsu HIT Yixing Academy of Environmental Protection Co. Ltd., gave a presentation on “The Practice and Innovations of Green Procurement at private Sector”. His talk began with the introduction of university-industry collaboration at HY. He gave the concept of government green procurement (GGP) and green procurement at private sector. Following this, the different roles in green procurement, implications of GGP, the practices and some cases of green procurement at private sectors, general criteria for green procurement, and the benefits of green procurement were also presented. His talk ended with the opportunities and challenges for the implementation green procurement.

Discussion

Korea clarified that the public participation in energy saving, mitigating climate change and air pollution prevention through initiatives of green credit card and carbon footprint has played a significant role, raised enormous social response and led to carbon emission reduction. He believed that such actions would bring Korea into a new era. Korea also recognized that China would expand the investment in environmental industries and Japan has made great efforts on building up the legislative framework of promoting environment protection. Korea would like to learn from China and Japan and integrate the experiences in its domestic policy-making.

Regarding Korea's green procurement, the enterprises which participate in green credit card scheme provide mileage to consumers who buy green products of the enterprises. With regard to the evaluation and issue the label of carbon footprint, the carbon emissions in the life cycle of products would be evaluated. The whole production process will be checked. Low-carbon product labeling refers to that the carbon emission is less than the benchmark during the production.

In response to the question from China, Korea explained that the carbon footprint of the resource will be quantified in terms of CO₂ emission index. The resource input will be transformed into CO₂ emission during the whole process.

Chairperson

This session had six presentations on green procurement and environmental labeling. The speakers shared wonderful experiences in carbon footprint and environmental labels and legislations on green procurement. These presentations also touched upon the issues of challenges and difficulties on mutual recognition of environmental labels and the market development of environmentally-friendly products. The discussions focused on the carbon footprint and the details need to be further discussed at the working level in the future.

Environmental Labeling Working Group Report

Mr. CAO Lei, the Deputy Director of the Deputy Director of Standard and Policy Research Office of Environmental Certification Center of MEP in China, presented on the "Introduction of MRA among China, Japan and Korea". He first introduced the progress of MRA discussion among China, Japan and Korea, relating to PC, MFD, DVD and TV. Next, he presented the revision and outline on printer (MFD) common criteria as well as the agreement on multi functional devices (MFD) common criteria. Then the outline of DVD equipment common criteria and the common criteria development plan on TV were presented sequentially.

Discussion

Japan: complemented that CJK has made great efforts and work in mutual recognition and built up cooperation with mutual trusts during the process. In May of 2012 the three countries agreed to set up the environmental labeling Working Group as a platform for discussions and long-term work. It had been recognized that environmental labeling is expanding the scope and categories and each nation has its own branches. Last and this year, GENICES inspections had been conducted to understand the work of each national environmental label organizations and the results turned to be excellent compliance. Japan believed that CJK would continue on the cooperation on mutual recognition of environmental labeling.

Korea clarified that the WG meeting plans to implement DVD common criteria standard as soon as possible. Japan will develop TV standard next year, so CJK agreed that the WG would develop the common criteria on TV next year.

Chairperson

Some progress has been achieved in the common criteria for environmental labeling, which is helpful for the further mutual recognition.

Session II - Environmental Technological Exchange and Cooperation

Chairperson: Mr. Kim Doohwan, Director General, Management Planning Department, KEITI, Korea

Mr. Hiroyuki Matsubara, senior analyst from Marubeni Research Institute of Japan, began the session with his presentation on "Environmental Technology Prospect". He began with the introduction of Marubeni and the role of Marubeni Research Institute. Then he talked about Marubeni's typical business models such as PV value chain and its global renewable energy projects. Following that, he introduced the plan of Marubeni's Mega-Solar program and expressed expectations toward technology characteristics such as low costs, higher battery efficiency and power system stabilization. Also, the experimental offshore floating wind farm project and desired technology for offshore wind farm were also touched upon in the presentation. In closing, he expressed a wish for successful collaboration of the three leading countries in Asia to resolve various environmental issues.

Mr. Motoo Kaneko, section chief of MOE, Japan, talked on "Current Measures for Environmental Technologies in MOE". He first introduced the strategy to promote green innovation with two fundamental plans of Basic Environment Plan and Science and Technology Basic Plan. The Promotion Strategy to realize sustainable society was also explained, including low carbon society and sound material-cycle society. Then two examples of promotion tactics were explained. One is Environment Research & Technology Development Fund, which is a

policy contribution-oriented competitive research fund which facilitates environmental research and technology development. The other example of promotion tactics is Japan Environmental Technology Verification which will issue the logo to the verified technologies. Three target technologies of treatment of human waste in natural area, improvement of lake and reservoirs and measurement of VOCs were briefly introduced in Japan ETV.

Mr. Yang Myungsik, Deputy Director of MOE, Korea, made his presentation on “International Cooperation with the Korea Environmental Technology”. He began with the introduction in the context of social and economic development and indications on the direction of environmental industry in Korea. He then talked about environmental industries in Korea: water treatment, solid waste management and air. Following that, he focused on the international cooperation programs that share experiences of green growth with partner countries. Environment Management Master Plan projects in Cambodia, Vietnam, Indonesia, Algeria and Azerbaijan, Joint R&D program for environmental technologies, Green Technology Transfer demonstration projects, Global Green Business Partnership and Environmental Cooperation Center in China, Vietnam and Indonesia were presented. At last, he introduced the background and the scope of the 3rd Master Plan for Environmental Technology & Industry (2013-2017).

Mr. Park Sungsoon, Director of Research from Shingang Hi-tech, Korea, presented on “Technology Introduction & Status of Chinese Projects”. Following a brief introduction on his company, he presented on the company’s Chinese projects in detail. He first talked about two Korea-China International Joint Research Projects in wastewater treatment in pig farm and starch manufacturing plant in Jilin and Shandong. Also, the joint research projects on river and lake purification technologies in Dongguan were touch upon. Following that, he introduced the Chinese soil remediation projects on heavy metals and VOCs in Shanghai. He concluded with some experiences of Chinese projects such as supports from Sino-Korea cooperation platforms, localization strategy, research on local technical demands and the cooperation network with high-performance local companies.

Mr. Xu Chang, President of ATK, delivered a presentation on “Strengthening International Cooperation to Promote the Development of Environmental Protection Industry”. First, he introduced the business scope, organizational structure and R&D of the company. The experiences of international cooperation with research institutions, universities, and industrial associations in Japan were introduced during the presentation. Also the plan of international cooperation with Korea was integrated into the company’s strategy plan. Finally, he shared the thoughts on development plan on R&D, manufacturing, marketing and international development of ATK.

Mr. Shao Kunkun, General Manager of Jiangsu Philip Environmental Engineering Co., Ltd., spoke on the topic of "Integrate Advantageous Resources Explore New Model for International Cooperation". His presentation began with a brief introduction of Philip and then he shared the experiences of Philip's international cooperation and partners. Philip is one of the largest aerator manufactures, and with its active exploration on international cooperation Philip has expanding its industrial chains. With the deep understanding of national policies, Philip has been dedicated into the enterprise-university collaboration and built-up of mutual trusts with partners in international cooperation. Two cases of international cooperation were explained in the presentation. One case involves a joint venture on water remediation with Japanese companies and the other case is cooperation with a Korean company on sewage treatment plant process design, energy efficient aeration equipment development and air suspension blower cooperation.

Discussion

In response to questions regarding Marubeni's offshore wind farm, Japan responded that the offshore wind farm projects in Japan are still in the demonstrating phase instead of commercialized projects and those projects in Europe (e.g. UK) are profitable. At the said demonstrating project, three different types of floating turbines with low capacity are tested.

In response to questions regarding Chinese projects of Shingang Hi-tech, Korea responded that those Chinese projects were derived from the Sino-Korea international joint research projects, an official collaboration between MEP of China and MOE of Korea. Such projects brought opportunities for companies from both sides. Also, the Chinese company in Shanghai is Shingang's Chinese branch instead of a joint venture.

Regarding the question on international cooperation of Korea's environmental technology, Korea answered that some projects are linked with ODA projects which are conducted at government level and the other cooperation projects are implemented by non governments.

By this year, Korea is expected to complete "the 3rd Master Plan for the environmental technology and industry ('13~17)" which deals with various environmental international cooperation projects. The details will be announced accordingly next year.

Chairperson

This session shared the experiences of technology exchanges and cooperation from both the governmental level and the corporate level. The participation of enterprises makes it significant to realize the cooperation.

Session III - Environmental Management

Chairperson: Ms. Ai Kaibu, Deputy Director, Environment and Economy Division, MOE, Japan

Mr. Jiang Xipei, Board Chairman of Far East Holding Group Co., Ltd, began with the talk on “Green Environment-friendly Energy-Saving The Development of Enterprise”. He briefly introduced the big backdrop of environmental protection and energy saving in current Chinese society and pointed out that these are the core issues and roads forward at Far East. Technology innovation for environmentally-friendly and energy-saving products is also very important to realize the sustainable development. He continued with the discussions on how Far East integrates of industry resources to reduce energy consumption and improve the efficiency by building up e-commerce platform and providing services on the electronic trading platform. Also, actions made to achieve low-carbon real estate and other environmentally-friendly products were touched upon.

Mr. Koji Tsuchihashi, researcher of Environment and Economy Division at MOE, Japan, made a presentation of “Promotion of Green Economy”. He began with the introduction of the 2012 publication of Advancement of Environmental Management and Use of Environmental Information in his Division. Then he continued with instructions of environmental management and environmental reporting and emphasized these two infrastructures are important to promote green economy. He discussed on measures that are related to greening of economy, including implementation of environmental management, environmental information disclosure, evaluation of environmental management, and sustainable financing and consumption. Then he moved to introduce the Environmental Reporting Guidelines 2012 edition, focusing on the concept and basic guidelines of environmental reporting. Following that, he summarized the evolvement of dissemination on environmental reporting by listed and non-listed companies in Japan. Also, principle financial actions toward sustainable society adopted in Japan were introduced and the progress of Eco Action 21 on GHG and waste reduction for promoting EMS at SMEs was briefed. After that, several issues were discussed over direction of environmental information disclosure such as desirable disclosure information, effective use of environmental reporting, expanding the base of small-sized business in environmental reporting and so on. Finally, he concluded the talk by displaying the proposal format of environmental report for ICT pilot project.

Mr. Kim Baik-Yong, expert researcher of Environmental Information Verification Center at KEITI, spoke on “Current Status and Future Plans of Korea’s Environmental Information Disclosure Policy”. First, the background of environmental information disclosure was reviewed. Then, he introduced the purpose, legal grounds and evolvement of environmental information policy during 2007-2012 in Korea. The expected effects of

environmental information disclosure were discussed, including vitalizing green management, increasing investment in green companies and creating positive outcomes to the environment and business. Following that, he talked about some key points of environmental information disclosure in Korea such as targeting facilities and disclosed items. The process of verification was explained afterwards. Also, he introduced the environmental information verification center at KEITI. Other measures facilitating environmental information disclosure were also touched upon, including nationwide briefing, helpdesk operation and supporting measures for SMEs. He concluded with the future plans for environmental information disclosure in Korea: expanding the scope of entities who join environmental information disclosure, diversifying incentives and creating environmental information verification logo.

Discussion

In response to questions on environmental information disclosure in Korea, Korea answered that consultancy services on institutional understanding are provided to SMEs. Because the initiative of environmental information disclosure is in the initial phase yet, so Korea aims to recruit as many companies as possible to the initiative as possible.

In response to questions regarding Eco Action 21, Japan responded that Eco Action 21 is simplified ISO 14000 but one of the significant difference is that ISO 14000 is verification and Eco Action 21 provides suggestions also.

In response to questions raised, Korea responded that the differences of environmental information disclosure for investors and consumers are that investors are more concerned about risk reduction while consumers are more concerned about the information of environmental pollution in local community.

Chairperson

This session shared three presentations on the importance and framework of environmental management from a Chinese company, MOE of Japan and KEITI of Korea.

The discussions focused on the supporting measures to SMEs, including Eco Action 21 in Japan. Also, relevant policies of environmental information disclosure in Korea also attracted participants' interests.

Summarizing Session

Introduction to the 13th RTM

Mr. Yang Myungsik, deputy director of MOE, Korea, talked about the direction of the next RTM hosted in Korea. He proposed something new, such as a slogan for the RTM and setting a theme for the RTM and emphasized lively communication exchanges among three countries. The agenda could be changed at the preliminary Meeting. He also suggested that the RTM should expand participation of environmental technology companies and set up the agenda and sessions to be closer to three countries' diverse and up-to-date business interests. The preliminary meeting was proposed to be held in June of 2013 and the RTM was suggested to be a two-day conference held before October 2013. The venue was proposed to be either Incheon or Busan. And the characteristics of two venue candidates were introduced.

Proposals

Japan: Japan agrees to have more participation of enterprises.

China: China agreed that RTM needs more participation of environmental technology and industry and strengthen the technological exchanges among three countries.

Ms. Ai Kaibu, deputy director of MOE, Japan, Mr. Yang Myungsik, deputy director of MOE, Korea and Ms. Cui Dandan, deputy director of division of Asian Affairs, Dpt. Of International Cooperation of MEP, China gave a closing address, respectively.