

**Meeting Minutes of Business Forum**  
**The 16<sup>th</sup> Tripartite Environment Ministers Meeting among Korea, China and Japan**  
**Daegu, Korea**  
**April 28-29<sup>th</sup>, 2014**

**Background**

Hosted by Ministry of Environment of Korea, the 16<sup>th</sup> Tripartite Environmental Ministers Meeting among Korea, China and Japan – Business Forum was held in Daegu during April 28-29<sup>th</sup>, 2014. The forum is designed to implement the initiative on enhancing environmental cooperation and dialogue. 50 (21 delegations and 29 observers) participants from Japan, Korea and China participated the meeting, represented by government, industry and institutions. The Business Forum focused on the theme, “Active Role of Environmental Industry in Environmental Cooperation in the Northeast Asian Region” this year. The presentation focused on the current situation and efforts as to environmental issues.

**Morning Session**

In the morning session, 7 companies made presentations; three from Japan, two from China and two from Korea.

<Japan>

- Kiyoto Furuta, representative of Canon Inc., introduced corporate activities from R&D to recycling to reduce life-cycle CO2 emission, and showed examples of OA products which are energy- and resource- efficient (e.g. decreasing use of energy, using bio-based plastics, etc.) . The representative remarked the further potentiality to improve products and technologies from the viewpoints of environment.
- Masayuki Aoyama, representative of Panasonic Corporation, explained concepts of “active” and “passive” energy management (e.g. eco-friendly products, thermal insulation) as to Smart Houses, and introduced activities for Smart Towns / Communities in Japanese and Chinese residual districts.
- Hideyuki Suzuki, representative of CTI Engineering Co., Ltd., introduced the solutions for water pollution management and several case studies, such as reclaimed water conveyance, water purification and high-rate filtration in Japan and China projects.

<China>

- Jiukun Hu, representative of New World, introduced activities on the “venous” industry such as solid waste resource and urban mining. In addition, the representative showed actual case studies and mentioned future perspectives for international cooperation with Japanese and Korean environmental enterprises in Northeast Asia.
- Dongfeng Liu, representative of CECEP Clean Tech Development Co., Ltd., showed the current and potential market in the hazardous waste disposal industry. In addition, the representative

made several suggestions on international cooperation among the three countries.

<Korea>

- Choi Chan Sik, representative of Daewoo Engineering & Construction Co., Ltd. introduced the company's environmental divisions as to water / waste water treatment plants and waste treatment facilities, etc. He also talked about domestic / overseas projects, including the ongoing 'El Harrach River Restoration Project' near Mediterranean Sea, and stressed the possible synergy effect in the development of environmental industry in the Northeast Asia.
- Lee Byung Sun, representative of Forcebel Co., Ltd. introduced its core MSW treatment technologies including Mechanical Biological Treatment (MBT), Sustainable Landfill Reclamation (SLR), C&D Waste sorting and recycling Technology (CWT) and Disaster Waste sorting Technology (DWT). He plans to expand its waste treatment overseas projects, especially through cooperation among Korea, China and Japan.

#### **Discussion in the morning session**

- J-eTech asked a question to Canon about annual CO2 reduction target of 3%. How does Canon achieve this target while experiencing the increase in production? Answer: While Canon's production is increasing, its energy conservation especially in logistics is improving. Therefore, overall emission is on the decline.
- CECEP Clean Tech Development Co., Ltd. asked a question to Canon and Panasonic. How they are collecting and recycling electronics. Answer provided by Canon. In the case of BtoB, the company understands how the products are used. Therefore, when a customer purchases a new model, then the old products are collected and some parts are recycled or reused depends on the condition. In BtoC transaction, the company cannot specify the usage by individual. Inter-governmental cooperation across countries is required. Answer given by Panasonic. The company is using Home Electronics Recycle Law. It also owns the recycling plant.
- Panasonic asked a question to Korea and China. How are they collecting and sorting the wastes. Forcebel's answer: the central government is in charge of collecting but the local government processes the wastes. New World: Depends on a policy set up by the government, utilizing the voucher system, specified vendors do the collecting. Harmful wastes which cannot be recycled are processed accordingly.
- Question by Panasonic: How does Korea do the sorting? Answer by KEITA. Certain things such as PET are collected by each manufacturer. Some wastes are collected by companies specialized in this work.
- J-eTech asked a question to Panasonic. Budget of Fujisawa Smart Town. How long was the preparation period? Answer: The town is built on Panasonic-owned land. Its preparation period was 10 years.
- China asked a question to CTI about a small pond in a big lake. How it is managed. Answer: The operation started relatively recently. In future, CTI will take proper measures to manage

the system.

- Canon asked a question to China. Preparation status of recycle plants. New World answered: Certified companies are collecting and processing the wastes. Potential capacity should be sufficient. CECEP Clean Tech Development Co., Ltd. answered: The current capacity can handle breaking down of the home electronics wastes. Processes that come after this point is a common problem for many nations; thus cooperation is necessary. Panasonic emphasized that, especially, extraction of rare metals is an important issue.
- CTI asked a question about the water reuse and efforts taking place in Southeast Asia. Answer given by Daewoo: In general, Korea is not suffering from water shortage. Considering that Southeast Asian countries are actively using recycled water and Korea also soon face a shortage of water, Korea expects to expand BTL business and others overseas, especially Southeast Asia.
- Jiangsu Philip asked a question to CTI about management of rivers. CTI answered. Multiple autonomous bodies are managing rivers. Overall management is done by the government. As to the water quality management, (Japanese) government is taking the initiative.
- Jiangsu Philip asked a question to CTI: Use of biological index in large rivers and lakes. Answer: Rivers are not classified according to the width. Qualities are measures at different locations. Lakes and dams have their quality index also.
- New World asked the question to Forcebel about the landfill. Its size and operational model. Answer by Forcebel: Government is leading landfill projects by helping the businesses with subsidies. Korea conducted a research on the status of landfill sites. Small ones are merged. Landfill with repeated use capacity is under active consideration. KEITA added: Korea has different garbage bags per type. The revenue is used for the waste management.
- New World asked the question about the volume of wastes processed in day. Forcebel answered: It depends on the machine's capacity. It also depends on the project duration.
- AERIX asked a question to New World about the waste water contained in used drum cans. Answer: Contained liquid in the can is considered toxic. It is processed in a toxic waste production center which is an integrated part of facilities to treat used drum cans.

### **Afternoon Session**

In the afternoon, seven companies offered their presentations; three from Korea, two from Japan and two from China.

<Korea>

- Jang Mi Jung, representative of THAD Co., Ltd. introduced a technology called THAD (Thermal Hydrolysis Anaerobic Digestion) and activities concerning organic sludge treatment. She stressed the technologies will enable effective use of energy, ultimately contribute to preserving the global environment.
- Ji Yang Hoon, representative of Aerix. Co., Ltd. introduced a variety of patents and technical solutions focused on air environmental industry. Providing examples of domestic / global

activities, he stressed the importance of widening foreign markets and cooperation among countries in the Northeast Asia.

- Jung Sung Min, representative of AnnaBini TEZ Corporation introduced its unique technology of Ammonium Nitrogen Stabilization (ANS) Digester. He explained its renewable energy business using the technology aims to convert bio-gas generated from waste resources into usable energy.

<Japan>

- Tsunehiko Nakagawa, representative of Nissan Motor Company, indicated how the automobile industry can contribute to environmental issues. The representative introduced effects of EV (Electric Vehicle) investments, and experimental activities, Dynamic Route Guidance System, to improve the traffic congestions in a Chinese city to reduce CO<sub>2</sub> and emission matters.
- Akira Takemura, representative of Sagawa Express Co., Ltd., showed activities and efforts to reduce CO<sub>2</sub> emission from the viewpoints of the transportation industry. The representative introduced the investments on low-emission vehicles, modal shift (e.g. rail cargo, ferry), carbon-neutrality activities and training for eco-friendly drivers, etc.

<China>

- Changmin Wu, representative of CSD E.P.Development Co., Ltd., remarked environment issues especially in Industry Park (e.g. water pollution) and introduced solutions. Furthermore, the representative suggested that Japanese and Korean companies could make joint efforts on local market exploration in China with those Chinese firms familiar with domestic environment and policies.
- Kunkun Shao, representative of Jiangsu Philip introduced the achievements and international cooperation by China Yixing Industrial Park for Environmental Science & Technology.

#### **Discussion in the afternoon session**

- CSD questioned 2 presenters from Korea, about the process of water treatment in Korea, especially about the treatment of sludge. THAD explained the history of how the process in Korea had evolved and how the sludge has been treated in Korea. AnnaBini TEZ made some additions that Korea is now looking for better process.
- CECEP Clean Tech Development Co., Ltd., asked AnnaBini TEZ about the fertilizer using the livestock waste. AnnaBini TEZ explained that the usage of such fertilizer is possible with technologies already available today, but the most important factor of 'cost' should be considered to hammer out the best way.
- New World asked Japan and Korea about efforts and activities towards CDM. Canon replied that UN CDM is very strict that Japan is now trying to make the bilateral CO<sub>2</sub> trade. Korea plans to implement an emission trading system by 2015.
- New World commented that bilateral CO<sub>2</sub> trade will be beneficial in the future.
- Canon also added CO<sub>2</sub> trade is one of the methods, but the businesses should focus on making

their business more efficient and strong, that in the end, this effort will decrease the CO2 emission.

### **Summary**

During the forum, participants made insightful presentations. They shared information and made suggestions on the expansion of environmental services and international cooperation on account of their abundant experiences in the area. It was mutually agreed that it is important to maintain and further develop the cooperative relationships among Japan, Korea and China, and that the cooperation among the three countries will contribute to reducing the burden on environment. The participants also confirm the future direction to enable private companies to pursue both company's profitability and environment friendliness.