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# NEWSLETTER

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**JAPAN SOCIETY OF MATERIAL CYCLE AND WASTE MANAGEMENT**

## Greetings from the Chairman of the International Committee

JSWME was reborn as the "General Incorporated Association, Japan Society of Material Cycles and Waste Management" this fiscal year.

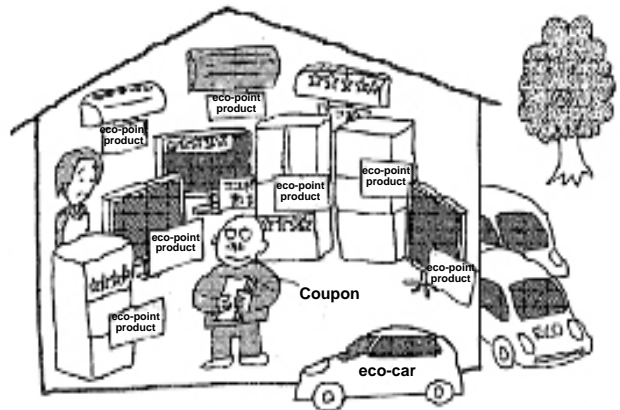
Our society has made a great contribution toward solving many problems over the last 20 years, and there are new issues arising to be solved with the changes in the waste management field. Thinking of the challenges for the global resources/energy issues and construction of a low-carbon society, the point of view of our society's activities will need to change from symptomatic therapy to causal therapy.

An international committee, based on the Japan-Korea society of waste management experts' cooperation treaty, the Society of Solid Waste Management Experts in Asia and Pacific Islands (SWAPI) has been held five times in the past. The 6<sup>th</sup> SWAPI was held in Nagoya this year with the support of the ministry of environment and related waste management and environmental groups.

The Japan-Korea symposium was developed as a joint international symposium (landfill of waste and global warming) with the Korea society of waste management experts, SWAPI and this society; with the international poster session renewed into a hybrid poster session, both were held successfully.

It will be with our great pleasure if the international committee will be the place of dispatch of information and research regarding material cycles and waste management in the Asia-Pacific region, and a place for exchange among young experts. I would like to thank all members of the society for their great support and cooperation.

(Yasushi Matsufuji)



“There is no family as ecological as mine!” High Moon

Author: They are far from the green consumer. People can get “eco-point” which is exchangeable to other products when purchase of some products and services.

## The Law for Promotion of Marine Litter Disposal: to Conserve Breathtaking Coastal Landscapes and Protect Beautiful and Rich Nature

### 1. Keystone of constitution

Recently, huge amounts of marine litter, including that from foreign countries are being washed onto shores all over Japan. This is causing serious problems such as damage to ecosystems and loss of beautiful beaches.

The government has been not only investigating the current situation of marine litter, and effective collection and disposal methods, it has also supported local governments that have disposed marine litter resulting from disasters and such through subsidies. However,

- 1) The quality and amount of marine litter washed ashore cannot be disposed of,

- 2) The responsibility of those concerned is unclear, and budget is insufficient, and
- 3) In some areas the source of the problem is in other countries and areas, making it difficult to solve the problem merely at the shore.

Therefore, further action was necessary to solve the problem.

On account of this, the "marine litter disposal promotion law" was formed as a member's bill in July, 2009 in order to smoothly handle marine litter and prevent its generation.

## 2. Main points

The main points of this law are as follows:

- 1) A fundamental principle of this law is to make effort to conserve and rehabilitate the integral coastal environment in consideration of beautiful landscape conservation and maintaining biodiversity.
- 2) It promotes the smooth disposal of waste by clarifying the responsibility of those concerned with handling marine litter. In particular, it specifies rules regarding prefectural coastal managers and cooperation of municipalities.
- 3) Appropriate role sharing and cooperation among the various bodies is aimed for through: setting up working groups on regional marine litter countermeasures and on marine litter countermeasures by relevant ministries and agencies; and cooperation and support of private groups.
- 4) Promotion of international cooperation for the solution of marine litter problems recognized as common issues of Japan and surrounding countries.

## 3. Future plan

To promote integrated and effective marine litter countermeasures, national basic policy will be established based on the law for promotion of marine litter disposal; further countermeasures will be implemented through newly established marine litter

countermeasure working groups; as well as cooperation with related government ministries and agencies.

(Before beach clean up)



(After beach clean up)



(Task Force of Marine Litter, Ministry of Environment)

### **The Moves of Policy for Recovery of Rare Metals from Cell Phones and Used Electric Appliances**

Last fiscal year was a year when recovery of rare metals from used electric appliances got high attention with the keyword of "city mine" under rising market prices of resources since two years ago. The market price of resources fell at the beginning of this year and interest in rare metals also cooled down; though the policy research about rare metals started last year will be continued this year.

1. The policy research was started by the central government last year

The places which were set in the central government

to discuss about possibilities of rare metal recovery from cell phones and other small electric appliances last fiscal year are as follows:

- 1) Joint jurisdiction of the Ministry of Environment (MOE) and the Ministry of Economy, Trade and Industry (METI): “Study Group for rare metal recovery from used small electric appliances,” researches about the technical aspects of effective collection of used electric appliances and recovery of rare metals from used devices such as cell phones by referring to advanced initiatives in local areas.
- 2) Environmental recycling bureau, department of information and communication devices, METI: “Investigative commission for collection and proper disposal of used home electric/electronic appliances,” investigates about the recycling benefit and cost based on the results of the survey which studied the composition of rare metals in appliances such as cell phones.
- 3) Ministry of Internal Affairs and Communications (MIC): “Workshop for ecological correspondences in information and communications” studies about rare metal recycling promotion for mobile phone terminals as MIC is the competent ministry of information and communication enterprises.

## 2. Policy investigations are integrated in the fiscal year 2009

MIC’s investigation concluded that rare metal recovery from mobile phones was technically difficult and it might increase environmental burden, consequently it was rather ideal to promote current voluntary collection by communication enterprises and recovery of precious metals. Hence, the investigations of this fiscal year were integrated as 1) absorbed 2), co-jurisdiction by MOE and METI.

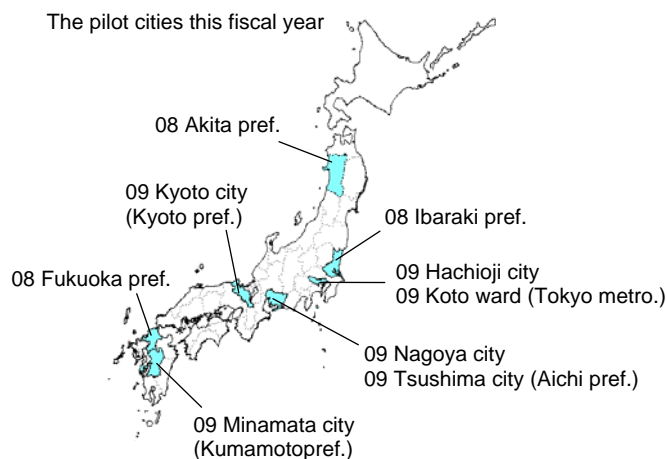
The pilot projects in 2008 were implemented in three prefectures, Akita, Ibaragi and Fukuoka. Demonstrative experiments adapted to each locality were conducted, using specific methodologies of used appliance collection and rare metal recovery. In addition to those pilot projects in three prefectures, other pilot cities are in the stage of selection this year,

by the following two local characteristic criteria:

- [i] Metropolitan areas and areas with a high ratio of younger generation :
  - Koto-ward and Hachioji City (Metropolitan Tokyo)
  - Nagoya City and Tsushima City (Aichi Prefecture)
  - Kyoto City (Kyoto Prefecture)
- [ii] Areas which have advanced recovery methods and intermediate treatment technologies :
  - Minamata City (Kumamoto Prefecture)

The following two points are the major investigation themes on model projects in this fiscal year:

- 1) Collection method of used appliances, main body, cost: seeking efficiency, user safety in cooperation and incentives are taken into consideration.
- 2) Development and practical use of rare metal recovery technologies: which and how to extract very small amounts of rare metals in a variety of appliances and devices, while current cell phone recycling recovers gold, but other priority precious metals and rare metals are scattered or there is no choice but to dispose of them.



Pilot cities “Study Group for rare metal collection from used small electric appliances” by MOE/METI

## 3. Conclusion

The Council on Economic and Fiscal Policy which is a consultative organ placed within the Cabinet Office released its “Future Development Strategy” in April 2009. In the strategy, a target was established to realize collection of 100 million used cell phones and

recovering 3.2 tons of gold (equivalent to 8 billion yen). However, this national strategy of the previous government is forced to be reviewed by the new government changed this September.

There is still a lot of room for investigation in recovering rare metals from used appliances due to economy of collection and recovering technology. It might need a few more years to discuss about introduction of the policy for it including enshrining it into recycling law.

(Kayoko Shichida)

### Activity of WAKATENOKAI (Young Researcher Committee)

Since last year, the JSWME was renewed as JSMCWM, to become an independent administrative institution. Also the “WAKATENOKAI (Young Researchers Committee)” was refreshed by the new executive members and started new activities such as domestic and international exchange activities and publishing. Here we would like to introduce one of our recent activities of international exchange with young researchers who belong to the Korean Society of Waste Management (KSWM). We have already held three international exchange parties at the annual meetings of each society. The second and third international exchange parties held this year are the focus of this article.

The 13<sup>th</sup> International Symposium with JSMCWM and KSWM was held at Daegu in Korea last May. At that time, WAKATENOKAI prepared “The Second International Exchange Party” with Korean young researchers. Nine Japanese members, included students, and 13 Korean young researchers, included students and company researchers as well, participated at this party and gathered at a Korean style BBQ restaurant. At first, we introduced the objective of our activities, especially concerning the international exchange between the Korean and Japanese society by the young researchers. Then, all members introduced themselves in English. Most of the Japanese students were very worried about communicating in English. However, since some of

the Korean students could speak Japanese fluently, it helped them to enjoy the party. Needless to say, the Korean alcohol “Soju” had a strong effect on feeling free to talk to each others on this occasion. Not only research or study issues, but also culture, food and behaviour were discussed. At last, we prepared a mailing list of both societies to be utilized for the exchange of information from each country in the near future. Post parties were held by two groups; one was “the group of real youth (students),” the other one was “the group insisted as youth.” Anyway, both groups kept up the merriment late into the Daegu night.

The 20<sup>th</sup> anniversary meeting of JSMCWM was held in September 2009, at Nagoya University. We also prepared “The Third International Exchange Party” at a Japanese style bar “Izakaya” The Korean group, with about 10 persons, and the Japanese group, with about 25 persons, joined this party. Most of Korean researchers were students from different universities in Korea. This time we received lots of financial support from many executive members and professors in JSMCWM. We talked about a lot of matters such as the future of each society, research topics and also the situation of each laboratory. This was our third international exchange party and some of the Japanese students had already started to contact personally with some Korean students by email. This is one of the expected results of our activity. Young researchers in both countries will be the main staff of the societies in the future. This relationship should be valuable for new research projects and useful for activities at an international level in both Japan and Korea. We really hope to keep in touch with each others at an individual and society level.

(Tomonori Ishigaki)

### Material Cycles and Waste Management Research Vol. 20, No.4 (July, 2009)

#### Preface

#### *What are the Sustainable Solid Waste Management and Resource Recycle Systems?*

Osamu Yamamoto

Special Issues: CDM Projects Relating to Waste Management in Developing Countries

***Clean Development Mechanism (CDM): Principle and Current Status***

Kazuhisa Koakutsu and Yuji Mizuno

***Japan's Development and Future Direction of the Co-benefits Approach***

Tokuya Wada

***Current Status and Tasks of CDM Project Activities in the Field of Waste Handling and Disposal***

Kosuke Kawai and Masato Yamada

***Activity on the Development of Methane-capture Projects at Landfill Sites***

Hiroyuki Kurita

***Semi-aerobic Landfill Project for CDM at a Malaysian Landfill Site***

Masatoshi Tsubaki, Syuichi Ueno and Yoshinobu Tsuji

***Bio-diesel Project Utilizing Waste Cooking Oil and Efforts to Address Climate Change at Local Government Level***

Fumiaki Utaka

***Tackling Global Climate Change through Solid Waste Management Assistance to Developing Countries***

Mitsuo Yoshida and Naoki Mori

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***Metals Contents in One Waste Personal Computer by Detailed Dismantling***

Tomoko Shirahase and Akiko Kida

***Concretization of Preparation Conditions for Phosphorus Fertilizer using a Sewage Sludge Ash-melting Process and Applicability Evaluation on Full-scale Agricultural Fields***

Shuji Himeno, Koji Kushida, Makoto Omine, Tomohiro Tsuyuzaki, Toshiya Komatsu and Shoichi Fujita

***Effect of Oxygen Concentration in Combustors on PCDD/F Formation in Model Waste Incineration***

Takeshi Hataaka, Akio Kitajima and Masao Takeuchi

***Study on High-Efficiency Heat Storage and Heat Release Conditions in a Pilot-Scale Regenerative Thermal Oxidizer for Toluene Decomposition***

Shinsuke Iijima, Katsuya Nakayama, Mitsuhiro Kubota and Hitoki Matsuda

***Ethanol Production from Enzymatic Hydrolysate of an Onion using *Saccharomyces cerevisiae****

Osamu Takimura, Hiroyuki Inoue, Katsuji Murakami and Shigeki Sawayama

***Inhibition of the Anaerobic Digestion of Cattle Manure with and Overload of Cosubstrates***

Ryo Nakakubo, Tetsuya Ishida, Juzo Matsuda and Kazuhiko Ohmiya

Current Members of JSMCWM as of April 30, 2009 (The figures in parenthesis indicate the difference from April, 2008)		
Regular Members	2,708	(-77)
Students	224	(-2)
Non-Japanese Member	79	(0)
Public Institutions	95	(-2)
Supporting Members	127	(-2)
Individuals of NPOs	7	(-1)
Total	3,547	(-84)

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