

International Recycle Conference Kanazawa '08 for THE CAR



Date: February 8th, 2008

Venue : Ishikawa Ongaku-do hall



A Welcome Speech

I am Norihiko Kondo, representative of RUM Alliance. I am very glad to make a welcome speech for Excellence the ambassadors and staffs of UNIDO. RUM Alliance held "The first International Recycling Conference Japan'06 for THE CAR" at the United Nations University with about 300 participants in May, 2006. We had a panel discussion under the theme of "Where do 840 million cars go?" We invited the former North America's Director of UNEP, Program Officer of UNEP and others.

Today we have a chance to make presentations about "The Second International Recycling Conference kanazawa'08 for THE CAR" that will be held in Kanazawa on February in 2008. I think that this Conference is a timely event to discuss about proper treatment of ELV (End of Life Vehicle) or global environmental issues. In Japan ELV Recycling Act has been enforced since January 1, 2005. This act aims to perform proper treatment and high recycling rate of ELV to reduce the amount of Automobile Shredder Residues (ASR).

We have the most advanced technology about ELV recycling. Now ELV is not waste but treasure of resources.

I am looking forward to invite you to the IREC, International Recycling Education Center, which established on our property in Kanazawa in May 2007. IREC is a research and training center to provide ELV recycling technology and knowledge with all over the world.

Now auto- recyclers are not dismantler but resource producer and we are required more sophisticated skills. We pledge the best effort to approach the global environmental problem on building up world wide ELV recycling system.

Thank you.

Norihiko Kondo

Chief director of RUM Alliance

The 2nd International Recycle Conference Kanazawa '08 for THE CAR

Sustainable ELV Recycling System

Environmental Impact from each unit of cars has been improved year by year, but the number of cars in the world is about 840 million in the end of 2003, and it is estimated to reach one billion in 2010. Referring each country share, United States occupies 230 million, Japan 74million, Germany 49million, and China about 36 million, which is increasing rapidly. The number of cars for sale in the world is 67million in 2005, and referring main country share, United States occupies 17millon, China 7,5million, and Japan 5,7million in 2006. Japan is the second largest auto manufacturing country in the world, the number of production in our own country was about 10 million and overseas production was also 10 million, total number has become over 20 million as of 2005. The same year of 2005, the number of ELV (End of Life Vehicle) in the world was estimated more than about 30 million, and about 3,5million ELV occurred in Japan.

In Japan ELV Recycling Act has been enforced since January 1, 2005. This act aims to perform proper treatment and high recycling rate of ELV to reduce the amount of Automobile Shredder Residues (ASR). Following these main objectives:

- 1) To build up circulation through industrial society.

 Auto-manufacturer called arterial industry and auto-recycler called venous industry have been linking more and more tightly with information, technology and resources.
- 2) To collect three specific items such as CFCs, Airbags and ASR.

 If these three hard to recycle item are collected properly, the remains can be processed appropriately under current recycle market. Auto manufacturers are not imposed total Extended Producer Responsibility (EPR) per unit but partial EPR restricted three specific items.
- 3) To be paid recycling fee by users.

When users buy a new car, he must pay the fee at the time of purchase. In the case of car in use, the fee is paid at the time of periodical inspection. This system aims to reduce recycling cost under the competition of manufacturers and to make the partial EPR clear.

From Cradle to Cradle on Resources

Average weight of four wheel vehicle is about 1,1 t and it consists of materials which contain iron (865kg), copper (9kg), aluminum (68kg), white gold and palladium (3g), plastics (90kg), glass (28kg), rubber (33kg) and so on. Experts predict that metal resources like gold, silver and copper will exhaust in 20 to 50 years in mid 21 century, if we continue to mine from underground as usual. For example, though we can extract only 1g from 1t gold ore, but we have acquired technology to refine about 300g from 1t end of life cellular phone.

We must not depend on non renewable underground resources with environmental destruction. Now is a time to treat end of life products appropriately, and to collect renewable urban mining resources. In order to realize these material circulation systematically, we auto-recycler have social responsibility to develop ourselves as a venous industry. While auto manufacturers are in arterial industry that make parts and assemble unit, ELV recyclers are in venous industry that perform proper treatment, reuse parts, and recycle materials. Like our human body is kept by circulation of artery and vein, the sustainability of global economy is kept by the rink of arterial industry and venous industry.

In Cooperation with UNIDO

The first International Recycling Conference was held in cooperation with UNEP (United Nations Environmental Program) and the Second International Recycling Conference will be held in cooperation with UNIDO (United Nations Industrial Development Organization). It is necessary for all mankind in both developed and developing countries to struggle against global warming or global environmental problem. The purpose of this Conference is to create model project that investment and technology can transfer from developed country to developing country. It is a time not to discuss the plan but to put it into practice.

We shall build up complete recycling system of ELV and management of recycling plant to reduce environment burden, greenhouse gas emission, and perform high rate of resource productivity in not only developed countries but also developing countries. This ELV recycling system has been researched and developed by KAIHO Sangyo Co Ltd. ELV is not waste but resources by detail dismantling technology by KAIHO method. We shall also construct plant for collecting and destruction of CFCs or HFC which is causative material of ozone layer disruption and high rate of Global Warming Potential (GWP).

Kyoto Protocol provided Annex 1 countries with imposing legally bounded target to reduce greenhouse gas emission and prescribed that developed countries are obliged to collect and destruct CFCs and HFC, but developing countries are not always carry it out. CFCs and HFC as catalyst for freezing gas are causative material of both ozone layer disruption and greenhouse effect which is more than from 1,300 times to 10 thousand times of CO2. Annex 1 country can adopt CDM (Clean Development Mechanism) and International Emissions Trading to perform their own promise. CDM is a very effective tool to reduce greenhouse gas, for it is operated in developing countries by a fund and technology invested from developed country. One of the purposes of the CDM project is to assist Non-Annex 1 parties in sustainable development.

At KAIHO Sangyo Co Ltd, We founded the IREC (International Recycling Education Center) in 2007. It is a training center that opened to all the people in the world, and provides curriculum, original textbooks and license for the people who intend to get proper treatment of ELV. Certified Committee of RUM Alliance gives Certificate of Certified Car Recycler (CCR) License. So when

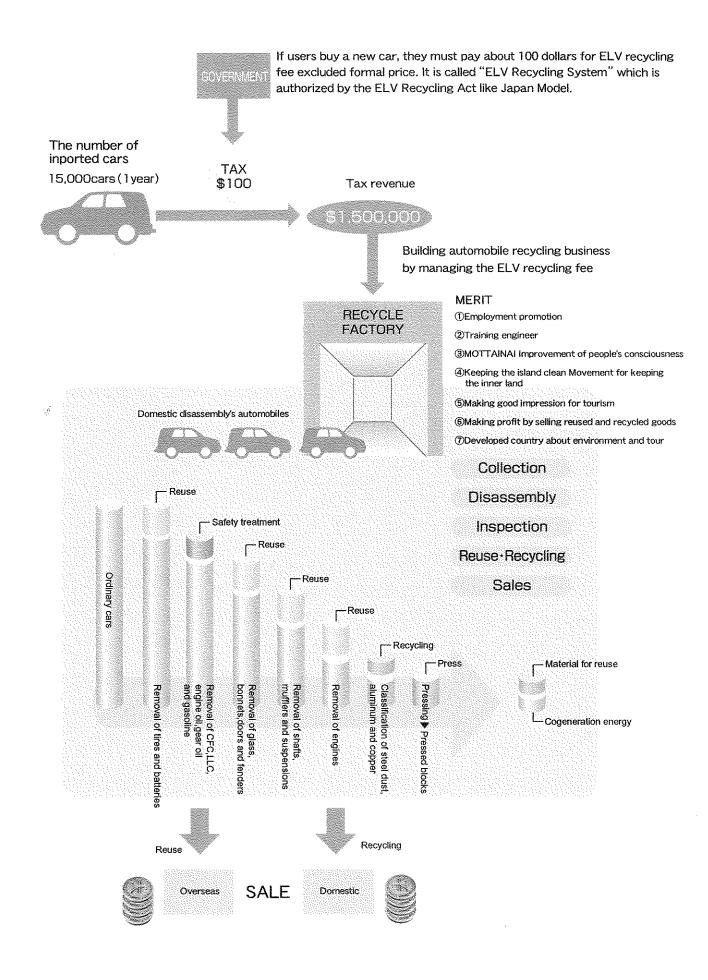
you take lectures and training in prescribed period, you can get CCR License and become leaders of the ELV recycling plant in your country.

Conclusion

To develop sustainable ELV recycling system, circulation of arterial industry and venous industry must be established immediately. The best way is to cooperate and to share technology, information,

and benefit between manufacturers and recyclers. With respect to easy design for dismantling, using renewable material, and exporting reuse engine or parts, we must work together more closely. Recycler will have more CSR (Corporate Social Responsibility) than before, for we contribute to reducing environmental burden and taking out material resources directly. Every industrial activity has to be bounded by environmental limit, resource limit, and energy concern. It has been more and more important for global economy to build up the cooperation and relation ship about interaction on arterial industry and venous industry. Shall we advance the world wide circulation of artery-vein industry with good will and hope under collaborations with various social sectors.

INTERNATIONAL AUTO-RECYCLE SYSTEM PROJECT



IREC/International Recycling Education Center









IREC (International Recycling Education Center) has been founded to provide workers in car recycle plant with the field research and training facility, where prepares education, discipline and accommodation. This field research and training center is opened to all the workers in the world, and provides curriculum, original textbooks and qualifies Certified Car Recycler (CCR). Though this CCR is not an authorized but a private sector, I think the first case of the qualification about auto-recycling technology in the world.

If you take lectures and training in prescribed period, you are qualified as CCR. IREC provides you with original textbook and lectures according to the curriculum for a week to four weeks. The contents of the textbook is follows that "Theory of Venous Industry", "Study of Resource Recycling", "Structure of Automobile", "Environmental Management System" and "ELV recycling Act" etc. We aime to establish "Auto-Recycology" through this research project. I am in charge of Theory of Venous Industry, so I will explain the outline in this presentation. To make industrial society more sustainable, we will build up circulation in cooperation with auto-manufacturers and auto-recyclers.

We are going to build up ELV global network which is compatible with environment and economy, also compatible with developed countries and developing countries. In order to advance this project, we must be in cooperation with UNIDO, so the second International Recycling Conference is a very significant step. Connecting with advanced Japanese recycling technology and network of UNIDO about investment and technology transfer, we can perform to resolve both proper treatment and resource recycling on ELV. When one billion automobile will become ELV year by year, we will have to treat properly anywhere in the world, of course in developing countries, so built up technology to turn into not waste but treasure. You can get technology and knowledge by learning at IREC. We will propose you to use the system of overseas technical scholarship and the facility to accept overseas technicians.