Panel Report 12

Business Support Policies from the Environmental Viewpoint

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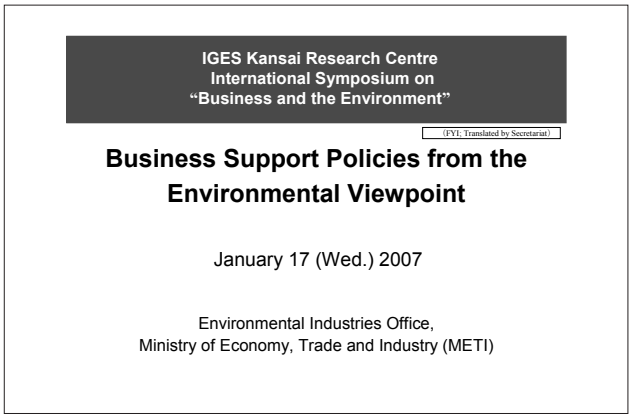

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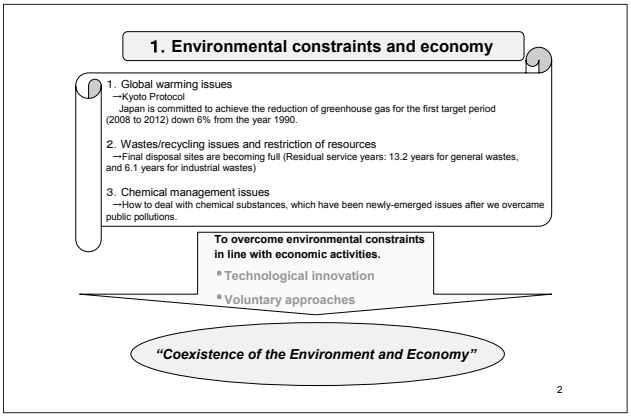

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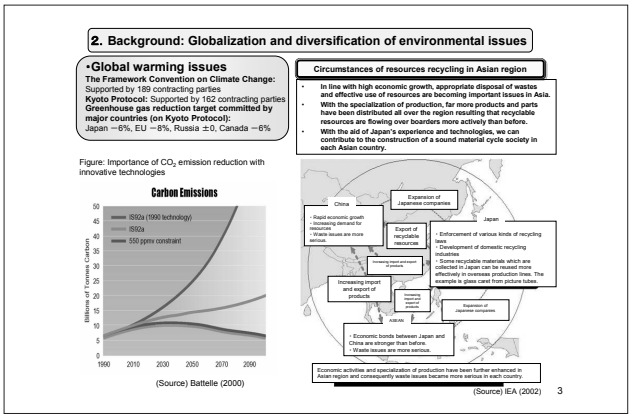
At present, the Ministry of Economy, Trade and Industry divides environmental policy into three categories. The first is global warming issues that Director Kamagata explained earlier. The second is waste and recycling issues, and, because of the restriction on resources, the building of a recycle-oriented society comes into play. The third and final category is chemical management issues, which deals with pollution issues and thousands upon thousands of chemical substances that exist. However, if these environmental policies are directly inserted into the economy, economic activity will shrink, therefore we must overcome these issues by finding a mode of coexistence between the environment and economy. The keywords here are technological innovation and voluntary approaches.



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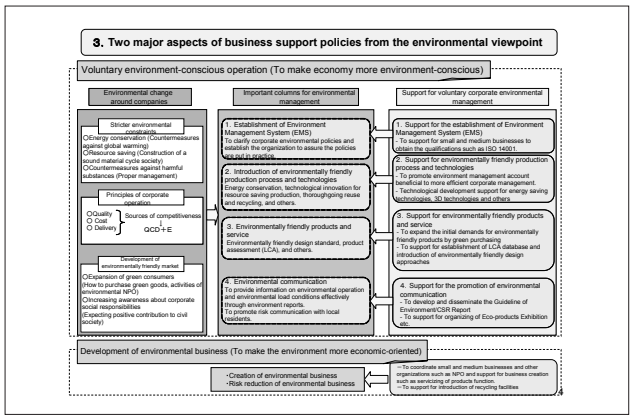
Let me start by providing you with some background to these policies. Environmental problems are very global and diversified in nature. For example, if CO_2 emissions are set at 550 ppm, global warming can be kept within +2℃ of the average world pre-industrialization temperature. However, as shown on this chart, using 1990s technology, emissions will increase. Using current technologies, the increase is like this, which leaves us a gap between reality and a 550 ppm level. Without technological innovation, we have a problem.

As for resources, products are going in and out of Japan and China, which has exhibited marked growth recently, because of ASEAN relations.

One particular note here is that recently rare metals and plastic bottles have been flowing from Japan to China. These resources are waste at one point in time and resources in another. Both need to be properly controlled. We believe that Japan should contribute a little more in this regard.

So what is being done about this? There are



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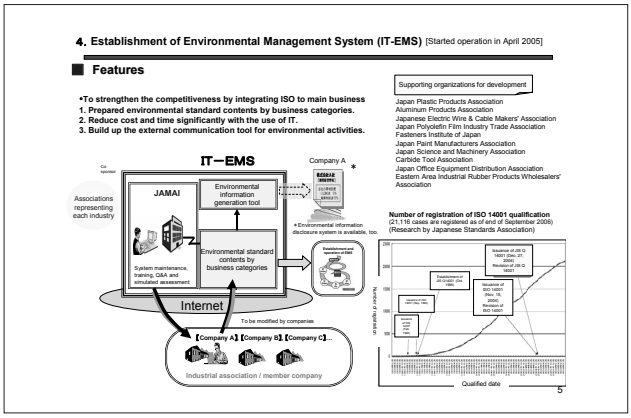
two major aspects of our business support from an environmental viewpoint. The first is to make the economy more environmental-conscious via voluntary environmental-conscious operation. We are asking people in all fields of industry to think about the environment. The other is to create new business in the environmental field. As I mentioned before about the background of our environmental policies, this presents various restrictions. For example, businesses must now think about the environment when dealing with quality costs. It is important here to look at this as a source of competitive strength. Moreover, in the background of this demand, there has been an increase in green consumers, and businesses are starting to show greater awareness of their social responsibilities.

What can businesses do? They can build environmental management systems and make their production processes environment-friendly. Services and other operations must also be designed for environmental-friendliness. And, the results of those activities must be communicated to the outside world. We have built support programs for each of these aspects, which I will explain later one by one.

Another approach to making the environment more economic-oriented is to create new businesses and reduce risk.

Let me begin with environmental management



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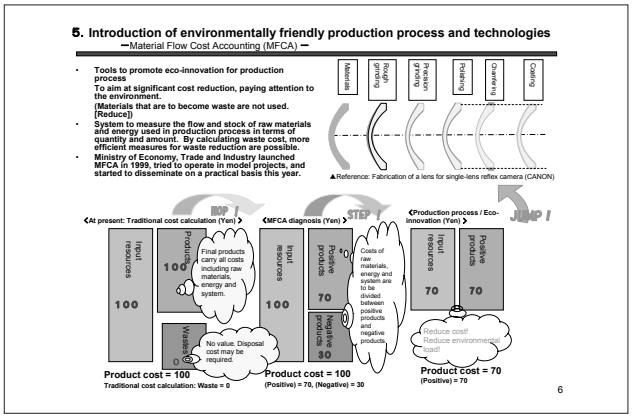
systems. It is rather hard to acquire ISO14000 accreditation. It takes money. Businesses haven't the staff. Staff costs money. So, they use IT. When looked at closely, IT has spread widely across the business world, but not so much with small and medium size companies. But, there are organizations specialized in various fields and, because the content in these specialized fields are more or less standardized by the type of business, these small and medium size businesses are organized around these supporting organizations. We, therefore, provided an information creation tool so that each company could update just the necessary information and report it to the outside via their website. In short, the tool saves money, shortens reporting time and centralizes know-how, and it can be easily acquired by any business. The system went into operation in April 2007. Please take a look at it. It is a lot less expensive than acquiring ISO accreditation.

The next thing I want to talk about is mak-



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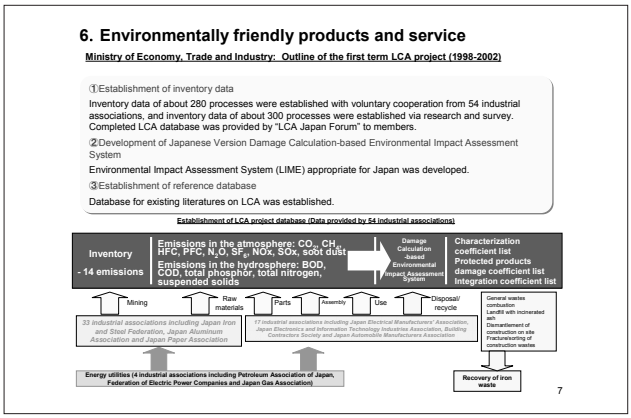
ing production processes environment-friendly. Though environmental accounting seems to cost money, this method is both environment-friendly and reduces costs. A simple conceptual view of how it works is shown here. By traditional cost calculations, when ¥100 is invested in resources and products are made therewith, defects and waste are not counted at all. If ¥100 was used to make the products shown in green, by traditional cost calculations, products are made with this ¥100. In other words, the cost is ¥100. However, the actual situation is different. Material flow cost accounting considers the waste generated in the various processes of making a product, material that is not transformed into products, the energy and equipment used for that, personnel costs and more as negative products rather than waste. So, as one goes through the various processes, waste is treated as a product and that inherent value is converted into money. As a result, even though ¥100 was invested, only about ¥70 was used for ¥100 of product. The remaining ¥30 is the value of negative products or, in other words, waste has a value. That being the case, it is safe to invest ¥70 to make ¥70 worth of product. If this is improved by technological innovation, only ¥70 of investment is needed to make ¥70 worth of product. If you don't want to produce it, don't invest more into it. This is more an age of reduction than an age of recycling. Material flow cost accounting is a tool for visualizing/diagnosing that.

This simplified illustration is an example from Canon. Lenses are made by grinding and polishing, but the outer part of the finished product is discarded by this processing. The grinding waste costs energy and manpower as was said earlier. Should it be treated as waste or as negative product? We have developed this kind of tool and are working now to diffuse it. Please take a look at it.

I want to now talk about environmental design



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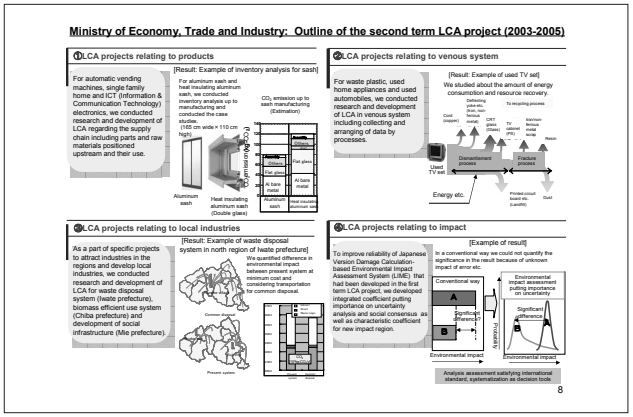
in LCA. We have been using LCA since 1998 and have built a database of the volunteer activities in the industrial world. With the cooperation of ironworks, materials, assembly and energy industries, we have calculated the unit costs of 14 inventory emissions such as CO_2 emissions into the atmosphere and chemical release into the hydrosphere across the entire life cycle of a product from mining and raw materials to parts, assembly, use and disposal. Using this database, we spent about five years developing a system for assessing the degree of environmental impact. The database was the result of the first project.

The second project was from 2003 to 2005. We



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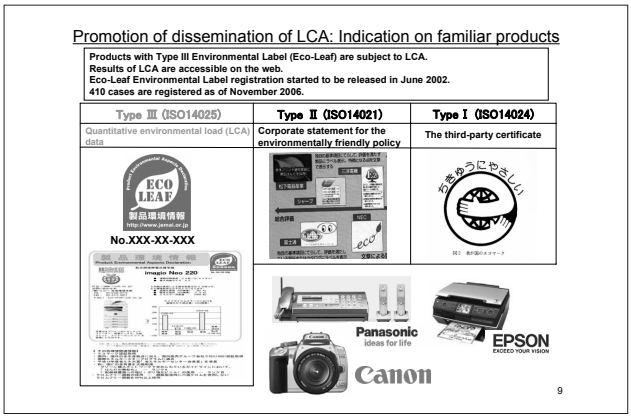
applied the database I just talked about to some products to see what would happen. This here regards the manufacture of aluminum window frames and aluminum window frames with double insulated glass. Actual CO_2 emissions were higher with the aluminum window frames with double insulated glass than just the aluminum window frames. Though this seems obvious, as we use this approach more, we expect to find some interesting reversals.

Venous systems as well, until now, simply ended with waste incineration. But, to recycle a TV, for example, it must be first manually disassembled, and then, if it cannot be salvaged, it has to be mechanically crushed and then the waste must be transported to a disposal site. This process can now be looked at in detail and the previously mentioned LCA data plugged in to make an assessment.

Moreover, LCA can be used not only to assess products but also local plans. For example, we can assess, indifferent of costs, which is environmentally advantageous: disposing of waste in a single location or in diverse locations.

Furthermore, it is now possible to investigate environmental impacts in detail. Before, assessments were done using a single parameter; the impact of A was so much and the impact of B was so much and so forth. But, in all actuality, B has this much uncertainty in and around this value and A has basically this much uncertainty in this area. So, now we can take this uncertainty into consideration in our investigations. This project went through fiscal 2005.

Communication means to convey and this is



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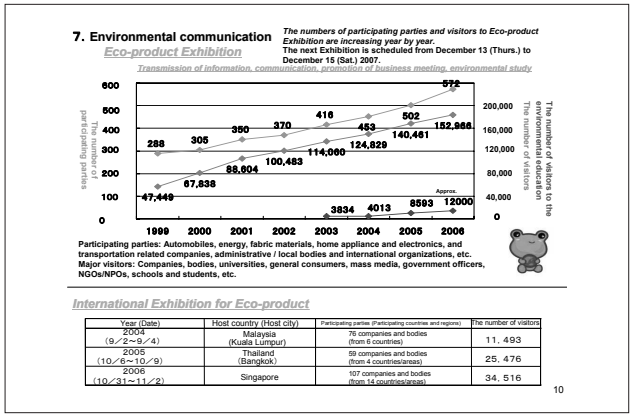
what the ISO Type III "Eco Leaf" label does. The Eco Leaf is affixed to a product and, below it, is a number. This number can be used to read the background information of the product. Quantitative information is provided on how much CO_2 is emitted from material acquisition to production, use and disposal. Japan is number one in this. Sweden and Korea have also gotten involved with it.

Another well-known label is the "Chikyu ni yasashii" eco mark, which literally means "gentle on the Earth". It indicates whether a product has cleared set standards or not. The label is acquired if those standards are cleared. The Type II labels are corporate statements of their environmental-friendly policies. Type III is third party accreditation. It takes considerable efforts to do and submit the calculations, therefore everyone should carefully weigh this when buying products. These are examples of products from Panasonic, Epson and Canon that recently acquired labels.



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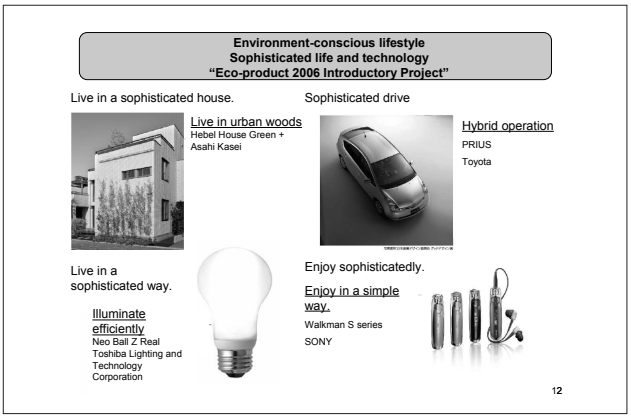
As for environmental communication, a three-day eco-products exhibition has been held every December since 1999 at the Big Sight in Tokyo. Not only does it promote business talks, but it also disseminates information, teaches about the environment and provides a venue for environmental communication. It first drew about 50,000 visitors, but last years, there were about 150,000 and twice as many exhibitors, too. It should also be pointed out that the number of students from elemental, middle and high school is increasing. Last December, about 12,000 students came as many schools incorporated the exhibition in their extracurricular activities. You should see it for yourself, but exhibits are presented by various organizations and businesses, national and local governments, and even from overseas. Moreover, visitors come from diverse backgrounds including consumers, mediapeople, businesspeople and students. Similar activities have been internationally developed. The exhibition was staged in Malaysia in 2004, Thailand in 2005 and last year in Singapore, drawing respectively 10,000, 25,000 and 34,000 visitors.

These are photos of the opening ceremony and venues of the eco-products exhibition. The site is usually so crowded you can get delirious, but everyone passionately prepares for it and the children listen carefully to what is said, so it is very effective. Event security watches out for children and exhibitors are instructed to be polite to children, so it is well liked. This photo is of the eco-products exhibition in Singapore. It was a very big success.

The eco-products exhibition is run under a dif-



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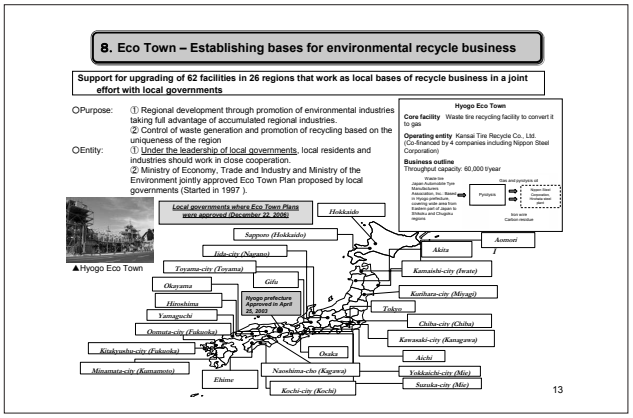
ferent theme each year. This year's theme was a particularly good one: Environment-Conscious Lifestyle – Sophisticated Life and Technology. Life should be enjoyed by living in a stylish home remindful of the Edo Period, saving energy by riding in a hybrid car, or by changing light bulbs to conserve energy. A long time ago, in my generation, stereo components systems were large, but this Walkman uses very little resources, saves energy and can be introduced into anyone'

s lifestyle without any trouble because it can be carried anywhere. There were all sorts of proposals such as this. If I may, let make a comparison of the Edo Period to a recycle-oriented society. In those days, clothes were recycled and, though this many seem sick, people sold their urine to farmers as fertilizer. It is said that urine of nobleman was sold at higher price than that of common people. It was recycled as part of the local economy, which I find very interesting.

This is a map of eco-towns that have been es-



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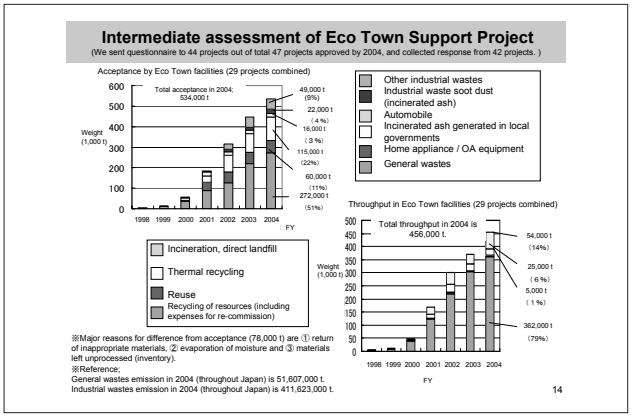
tablished as bases for the environmental recycle business. In the past, coastal areas had various problems with pollution because many large industries concentrated there. It was thought that these areas could be redeveloped by converting them to environmental industries or for local area recycling. Local governments spearhead eco-town planning and work in cohort with residents and businesses. Plans are jointly approved by the Ministry of the Environment and my Ministry of Economy, Trade and Industry, and funding is provided for core facilities. To date, funding has been provided for 62 facilities in 26 locations. This is the Hyogo Eco Town that was approved in 2003. The facility collects old tires, thermally decomposes them to recover gas and steel wire, which is then recycled by Nippon Steel.

Let me talk about our assessment of the eco-



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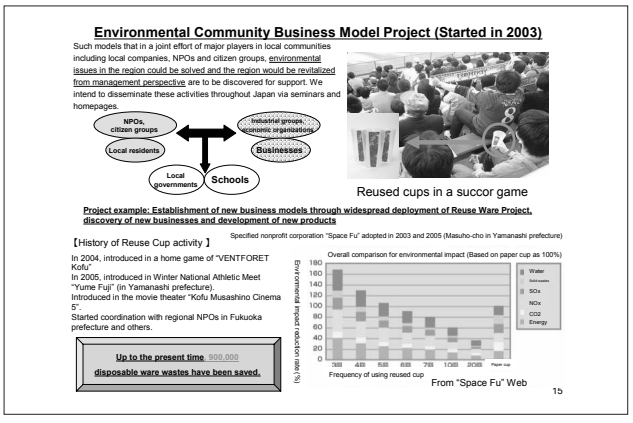
town support project. Since the program was launched, the volume of waste accepted has only grown. A breakdown of this waste shows there to be general waste, home appliances, industrial waste and cars. How this waste was processed is shown by the light blue color here, but about 80 % was recycled. Other than that, some is reused and some is thermally recycled, which are also good ways of use.

Most of what I have talked about till now has



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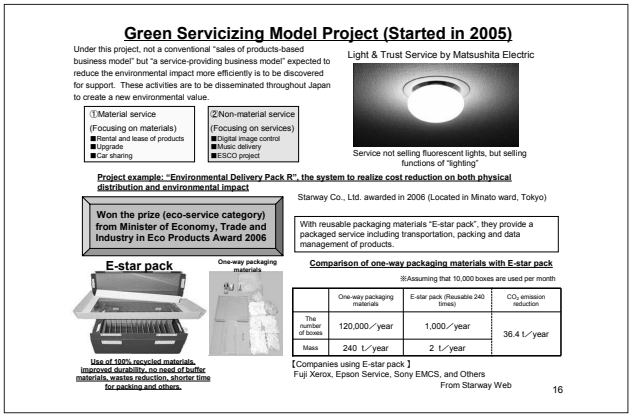
been about big corporations. Now I will talk about the environmental community business. Local areas face a variety of environmental problems, and some business models are set up to solve them via the efforts of NPOs, residents and private business groups in those areas. Once a business is set up, it can continue forever. In that sense, this

business model aims to continually resolve local environmental problems. This project has started at 2003. Just to give you an example, the paper cups and plates used at events end up in a waste pile once the event is over. Then, a recycle-reuse initiative was started. A biodegradable plastic was developed just for reuse. The environmental load reduction effect is being quantitatively measured. If 100 paper cups are used and each is reused 2 or 3 times, the load is heavy, but after 5, 6, 10 or 20 reuses, which includes the energy of wash water, the load is completely reversed. To date, they have reduced disposable plate waste by 900,000 plates. This initiative has spread to the J League in Yamanashi and the National Athletic Meet. It continues as a business and salaries of those there employed are rising, which is a big incentive for those involved, so we are very excited about it.

I would like to speak a moment about green



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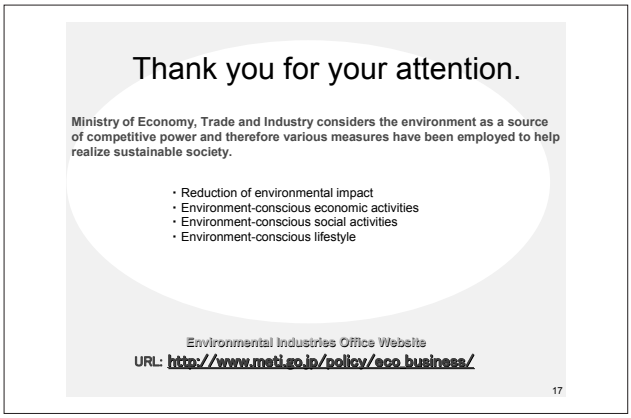
servicing model projects. As Professor Gunjima pointed out, these model projects provide services rather than selling products. Here, a service provider rents out products they have. By renting, only one product is needed, therefore load can be greatly reduced. Products that consumers hold onto can be upgraded and shared such as by car sharing. And, there are non-material services such as digital image management, music delivery and the ESCO projects that Professor Gunjima spoke about. A very well-known service in Osaka is Matsushita's "Light & Trust Service". Conventionally, people purchase fluorescent light bulbs, but this service sells the function of the light. Matsushita Electric Industrial takes care of all maintenance and disposal of the light bulbs. Because it centrally manages everything, the system is very efficient. And, because it is very effective, it is well received and business is growing.

Another business example is the "E-Star Pack" that reduces both distribution costs and environmental impact. Before, cardboard was used as padding, but it was discarded after use one time, creating a mountain of trash. Therefore, a box that is sturdy enough to be used several times over and does not need padding was developed from recycled paper. These environmental impact calculations compare one-way packaging and repeated use with the E-Star Pack. This much CO_2 can be reduced a year. It is being used more and more by Fuji Xerox, Epson Service and Sony EMCS, and is widespread as it was recently introduced on TV.

We want to continue looking for ways that the



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environment can be developed as business that responds to both economic and environmental concerns. We welcome your ideas. Thank you for your attention.

IGES Kansai Research Centre
International Symposium on
"Business and the Environment"

(FYI; Translated by Secretariat)

Business Support Policies from the Environmental Viewpoint

January 17 (Wed.) 2007

Environmental Industries Office,
Ministry of Economy, Trade and Industry (METI)

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1. Environmental constraints and economy

1. Global warming issues
→Kyoto Protocol
Japan is committed to achieve the reduction of greenhouse gas for the first target period (2008 to 2012) down 6% from the year 1990.

2. Wastes/recycling issues and restriction of resources
→Final disposal sites are becoming full (Residual service years: 13.2 years for general wastes, and 6.1 years for industrial wastes)

3. Chemical management issues
→How to deal with chemical substances, which have been newly-emerged issues after we overcame public pollutions.

To overcome environmental constraints in line with economic activities.

- **Technological innovation**
- **Voluntary approaches**

"Coexistence of the Environment and Economy"

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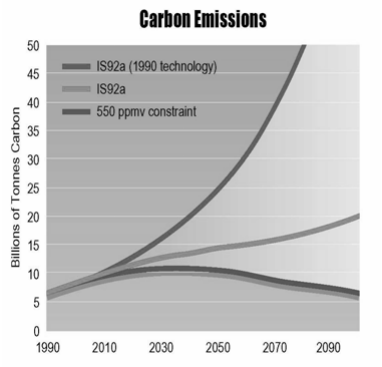
2. Background: Globalization and diversification of environmental issues

・Global warming issues

The Framework Convention on Climate Change: Supported by 189 contracting parties
Kyoto Protocol: Supported by 162 contracting parties
Greenhouse gas reduction target committed by major countries (on Kyoto Protocol):
Japan －6%, EU －8%, Russia ±0, Canada －6%

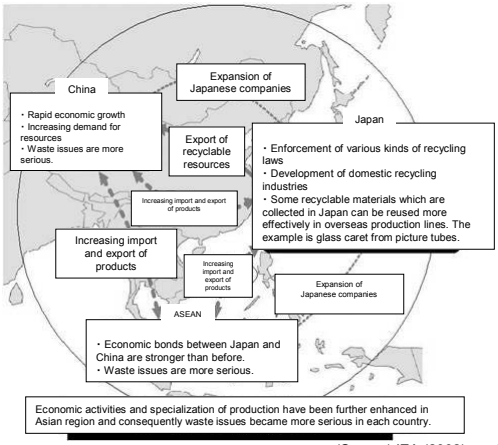
Figure: Importance of CO_2 emission reduction with innovative technologies



(Source) Battelle (2000)

Circumstances of resources recycling in Asian region

- **In line with high economic growth, appropriate disposal of wastes and effective use of resources are becoming important issues in Asia.**
- **With the specialization of production, far more products and parts have been distributed all over the region resulting that recyclable resources are flowing over boarders more actively than before.**
- **With the aid of Japan's experience and technologies, we can contribute to the construction of a sound material cycle society in each Asian country.**



(Source) IEA (2002)

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3. Two major aspects of business support policies from the environmental viewpoint

Voluntary environment-conscious operation (To make economy more environment-conscious)

Environmental change around companies	Important columns for environmental management	Support for voluntary corporate environmental management
Stricter environmental constraints ○Energy conservation (Countermeasures against global warming) ○Resource saving (Construction of a sound material cycle society) ○Countermeasures against harmful substances (Proper management)	1. Establishment of Environment Management System (EMS) To clarify corporate environmental policies and establish the organization to assure the policies are put in practice.	1. Support for the establishment of Environment Management System (EMS) - To support for small and medium businesses to obtain the qualifications such as ISO 14001.
Principles of corporate operation ○Quality ○Cost ○Delivery Sources of competitiveness ↓ QCD＋E	2. Introduction of environmentally friendly production process and technologies Energy conservation, technological innovation for resource saving production, thoroughgoing reuse and recycling, and others.	2. Support for environmentally friendly production process and technologies - To promote environment management account beneficial to more efficient corporate management. - Technological development support for energy saving technologies, 3D technologies and others
Development of environmentally friendly market ○Expansion of green consumers (How to purchase green goods, activities of environmental NPO) ○Increasing awareness about corporate social responsibilities (Expecting positive contribution to civil society)	3. Environmentally friendly products and service Environmentally friendly design standard, product assessment (LCA), and others.	3. Support for environmentally friendly products and service - To expand the initial demands for environmentally friendly products by green purchasing - To support for establishment of LCA database and introduction of environmentally friendly design approaches
	4. Environmental communication To provide information on environmental operation and environmental load conditions effectively through environment reports. To promote risk communication with local residents.	4. Support for the promotion of environmental communication - To develop and disseminate the Guideline of Environment/CSR Report - To support for organizing of Eco-products Exhibition etc.

Development of environmental business (To make the environment more economic-oriented)

・Creation of environmental business
・Risk reduction of environmental business

－To coordinate small and medium businesses and other organizations such as NPO and support for business creation such as servicizing of products function.
－To support for introduction of recycling facilities

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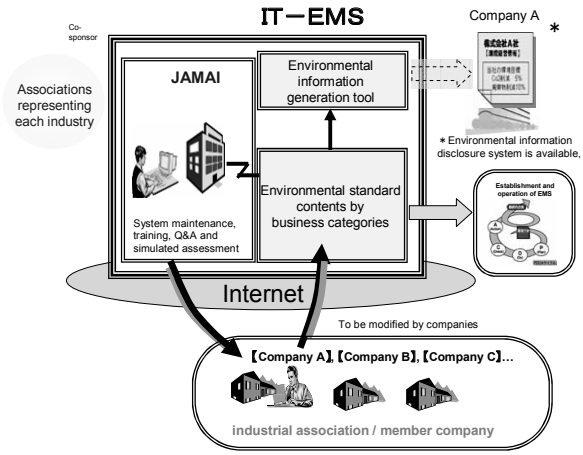
4. Establishment of Environmental Management System (IT-EMS) [Started operation in April 2005]

Features

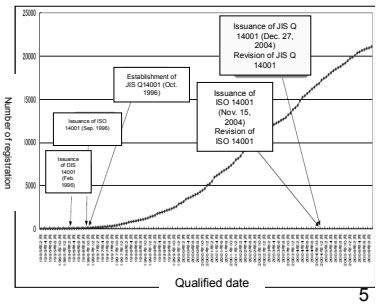
•To strengthen the competitiveness by integrating ISO to main business
1. Prepared environmental standard contents by business categories.
2. Reduce cost and time significantly with the use of IT.
3. Build up the external communication tool for environmental activities.

Supporting organizations for development

Japan Plastic Products Association
Aluminum Products Association
Japanese Electric Wire & Cable Makers' Association
Japan Polyolefin Film Industry Trade Association
Fasteners Institute of Japan
Japan Paint Manufacturers Association
Japan Science and Machinery Association
Carbide Tool Association
Japan Office Equipment Distribution Association
Eastern Area Industrial Rubber Products Wholesalers' Association



Number of registration of ISO 14001 qualification
(21,116 cases are registered as of end of September 2006)
(Research by Japanese Standards Association)



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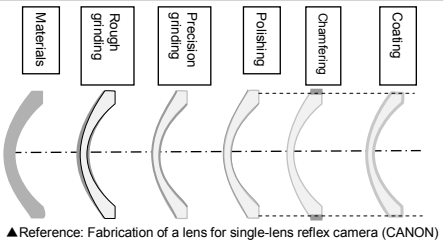
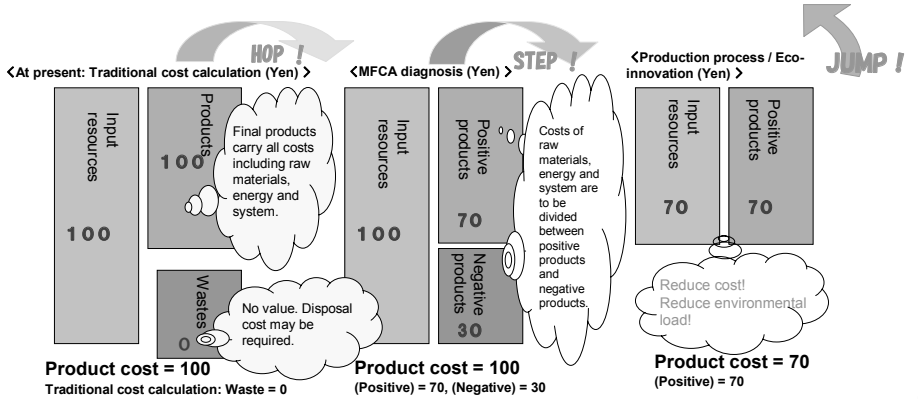
5. Introduction of environmentally friendly production process and technologies
−Material Flow Cost Accounting (MFCA) −

- **Tools to promote eco-innovation for production process**
  To aim at significant cost reduction, paying attention to the environment.
  (Materials that are to become waste are not used. [Reduce])
- **System to measure the flow and stock of raw materials and energy used in production process in terms of quantity and amount. By calculating waste cost, more efficient measures for waste reduction are possible.**
- **Ministry of Economy, Trade and Industry launched MFCA in 1999, tried to operate in model projects, and started to disseminate on a practical basis this year.**



▲Reference: Fabrication of a lens for single-lens reflex camera (CANON)



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6. Environmentally friendly products and service

Ministry of Economy, Trade and Industry: Outline of the first term LCA project (1998-2002)

①Establishment of inventory data

Inventory data of about 280 processes were established with voluntary cooperation from 54 industrial associations, and inventory data of about 300 processes were established via research and survey. Completed LCA database was provided by "LCA Japan Forum" to members.

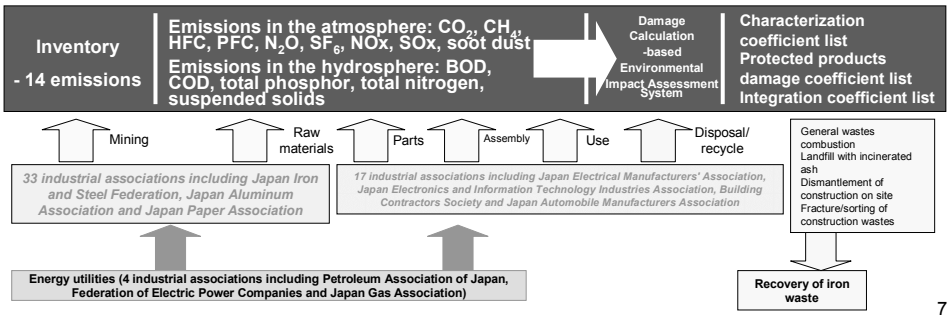
②Development of Japanese Version Damage Calculation-based Environmental Impact Assessment System

Environmental Impact Assessment System (LIME) appropriate for Japan was developed.

③Establishment of reference database

Database for existing literatures on LCA was established.

Establishment of LCA project database (Data provided by 54 industrial associations)



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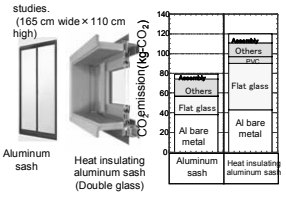
Ministry of Economy, Trade and Industry: Outline of the second term LCA project (2003-2005)

①LCA projects relating to products

For automatic vending machines, single family home and ICT (Information & Communication Technology) electronics, we conducted research and development of LCA regarding the supply chain including parts and raw materials positioned upstream and their use.

[Result: Example of inventory analysis for sash]

For aluminum sash and heat insulating aluminum sash, we conducted inventory analysis up to manufacturing and conducted the case studies. (165 cm wide × 110 cm high)

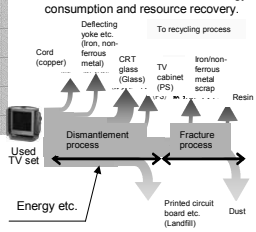


②LCA projects relating to venous system

For waste plastic, used home appliances and used automobiles, we conducted research and development of LCA in venous system including collecting and arranging of data by processes.

[Result: Example of used TV set]

We studied about the amount of energy consumption and resource recovery.

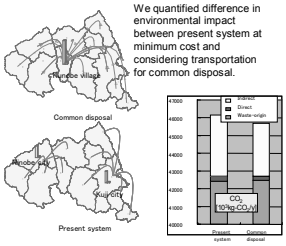


③LCA projects relating to local industries

As a part of specific projects to attract industries in the regions and develop local industries, we conducted research and development of LCA for waste disposal system (Iwate prefecture), biomass efficient use system (Chiba prefecture) and development of social infrastructure (Mie prefecture).

[Result: Example of waste disposal system in north region of Iwate prefecture]

We quantified difference in environmental impact between present system at minimum cost and considering transportation for common disposal.

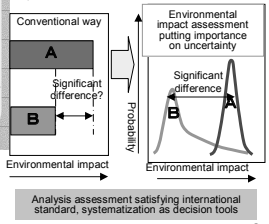


④LCA projects relating to impact

To improve reliability of Japanese Version Damage Calculation-based Environmental Impact Assessment System (LIME) that had been developed in the first term LCA project, we developed integrated coefficient putting importance on uncertainty analysis and social consensus as well as characteristic coefficient for new impact region.

[Example of result]

In a conventional way we could not quantify the significance in the result because of unknown impact of error etc.



Analysis assessment satisfying international standard, systematization as decision tools

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Slide ⑧

Promotion of dissemination of LCA: Indication on familiar products

Products with Type III Environmental Label (Eco-Leaf) are subject to LCA.
Results of LCA are accessible on the web.
Eco-Leaf Environmental Label registration started to be released in June 2002.
410 cases are registered as of November 2006.

Type Ⅲ (ISO14025)	Type Ⅱ (ISO14021)	Type Ⅰ (ISO14024)
Quantitative environmental load (LCA) data	Corporate statement for the environmentally friendly policy	The third-party certificate

No.XXX-XX-XXX

Panasonic
ideas for life

EPSON
EXCEED YOUR VISION

Canon

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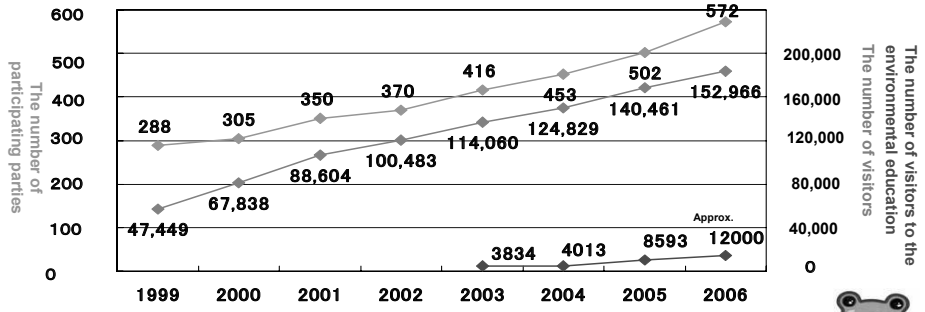
7. Environmental communication

Eco-product Exhibition

The numbers of participating parties and visitors to Eco-product Exhibition are increasing year by year.
The next Exhibition is scheduled from December 13 (Thurs.) to December 15 (Sat.) 2007.

Transmission of information, communication, promotion of business meeting, environmental study



Participating parties: Automobiles, energy, fabric materials, home appliance and electronics, and transportation related companies, administrative / local bodies and international organizations, etc.
Major visitors: Companies, bodies, universities, general consumers, mass media, government officers, NGOs/NPOs, schools and students, etc.

International Exhibition for Eco-product

Year (Date)	Host country (Host city)	Participating parties (Participating countries and regions)	The number of visitors
2004 (9／2～9／4)	Malaysia (Kuala Lumpur)	76 companies and bodies (from 6 countries)	11, 493
2005 (10／6～10／9)	Thailand (Bangkok)	59 companies and bodies (from 4 countries/areas)	25, 476
2006 (10／31～11／2)	Singapore	107 companies and bodies (from 14 countries/areas)	34, 516

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Eco-product Exhibition 2006

Opening ceremony

Environmental education

Venue crowded with visitors

International Exhibition for Eco-product (Singapore)

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Environment-conscious lifestyle
Sophisticated life and technology
"Eco-product 2006 Introductory Project"

Live in a sophisticated house.

Live in urban woods
Hebel House Green +
Asahi Kasei

Sophisticated drive

Hybrid operation
PRIUS
Toyota

Live in a sophisticated way.

Illuminate efficiently
Neo Ball Z Real
Toshiba Lighting and Technology Corporation

Enjoy sophisticatedly.

Enjoy in a simple way.
Walkman S series
SONY

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8. Eco Town – Establishing bases for environmental recycle business

Support for upgrading of 62 facilities in 26 regions that work as local bases of recycle business in a joint effort with local governments

○Purpose: ① Regional development through promotion of environmental industries taking full advantage of accumulated regional industries.
② Control of waste generation and promotion of recycling based on the uniqueness of the region

○Entity: ① Under the leadership of local governments, local residents and industries should work in close cooperation.
② Ministry of Economy, Trade and Industry and Ministry of the Environment jointly approved Eco Town Plan proposed by local governments (Started in 1997).

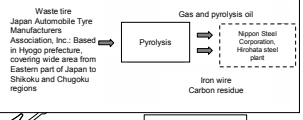
▲Hyogo Eco Town

Hyogo Eco Town

Core facility Waste tire recycling facility to convert it to gas

Operating entity Kansai Tire Recycle Co., Ltd. (Co-financed by 4 companies including Nippon Steel Corporation)

Business outline
Throughput capacity: 60,000 t/year



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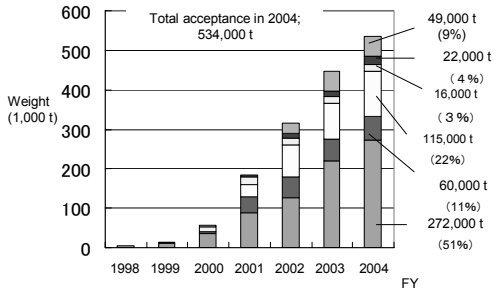
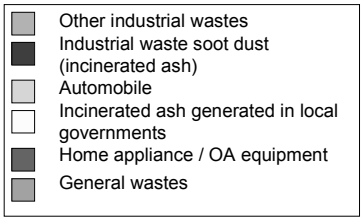
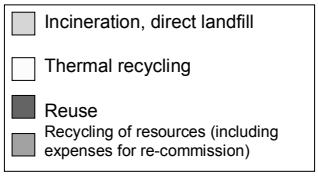
Intermediate assessment of Eco Town Support Project

(We sent questionnaire to 44 projects out of total 47 projects approved by 2004, and collected response from 42 projects.)

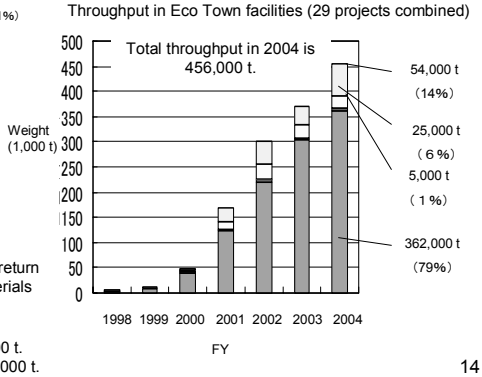
Acceptance by Eco Town facilities (29 projects combined)







Throughput in Eco Town facilities (29 projects combined)



※Major reasons for difference from acceptance (78,000 t) are ① return of inappropriate materials, ② evaporation of moisture and ③ materials left unprocessed (inventory).
※Reference;
General wastes emission in 2004 (throughout Japan) is 51,607,000 t.
Industrial wastes emission in 2004 (throughout Japan) is 411,623,000 t.

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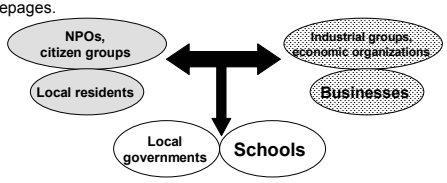
Environmental Community Business Model Project (Started in 2003)

Such models that in a joint effort of major players in local communities including local companies, NPOs and citizen groups, environmental issues in the region could be solved and the region would be revitalized from management perspective are to be discovered for support. We intend to disseminate these activities throughout Japan via seminars and homepages.



Reused cups in a succor game

Project example: Establishment of new business models through widespread deployment of Reuse Ware Project, discovery of new businesses and development of new products

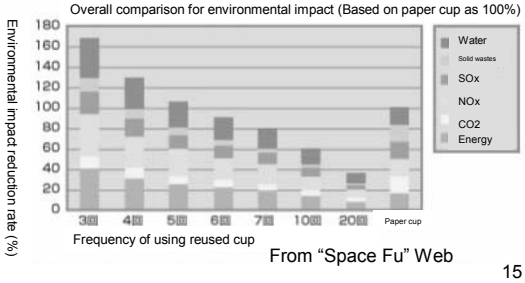
Specified nonprofit corporation "Space Fu" adopted in 2003 and 2005 (Masuho-cho in Yamanashi prefecture)

【History of Reuse Cup activity 】

In 2004, introduced in a home game of "VENTFORET Kofu"
In 2005, introduced in Winter National Athletic Meet "Yume Fuji" (in Yamanashi prefecture).
Introduced in the movie theater "Kofu Musashino Cinema 5".
Started coordination with regional NPOs in Fukuoka prefecture and others.

Up to the present time, 900,000 disposable ware wastes have been saved.

Overall comparison for environmental impact (Based on paper cup as 100%)



Frequency of using reused cup

From "Space Fu" Web

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Green Servicizing Model Project (Started in 2005)

Under this project, not a conventional "sales of products-based business model" but "a service-providing business model" expected to reduce the environmental impact more efficiently is to be discovered for support. These activities are to be disseminated throughout Japan to create a new environmental value.

①Material service	②Non-material service
(Focusing on materials)	(Focusing on services)
■Rental and lease of products	■Digital image control
■Upgrade	■Music delivery
■Car sharing	■ESCO project

Light & Trust Service by Matsushita Electric

Service not selling fluorescent lights, but selling functions of "lighting"

Project example: "Environmental Delivery Pack R", the system to realize cost reduction on both physical distribution and environmental impact

Won the prize (eco-service category) from Minister of Economy, Trade and Industry in Eco Products Award 2006

Starway Co., Ltd. awarded in 2006 (Located in Minato ward, Tokyo)

With reusable packaging materials "E-star pack", they provide a packaged service including transportation, packing and data management of products.

E-star pack

Use of 100% recycled materials, improved durability, no need of buffer materials, wastes reduction, shorter time for packing and others.

One-way packaging materials

Comparison of one-way packaging materials with E-star pack

※Assuming that 10,000 boxes are used per month

	One-way packaging materials	E-star pack (Reusable 240 times)	CO_2 emission reduction
The number of boxes	120,000／year	1,000／year	36.4 t／year
Mass	240 t／year	2 t／year	

【Companies using E-star pack 】
Fuji Xerox, Epson Service, Sony EMCS, and Others

From Starway Web

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Thank you for your attention.
Ministry of Economy, Trade and Industry considers the environment as a source of competitive power and therefore various measures have been employed to help realize sustainable society.
・Reduction of environmental impact
・Environment-conscious economic activities
・Environment-conscious social activities
・Environment-conscious lifestyle
Environmental Industries Office Website
URL: http://www.meti.go.jp/policy/eco_business/
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