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## Global 500 Award Ceremony on World Environment Day in Tokyo

On 5 June United Nations World Environment Day, the Ceremony of Global 500 Award was held in Tokyo, Japan under the joint sponsorship of the Japanese Government, United Nations Environment Programme (UNEP), the Tokyo Metropolitan Government and the Global 500 Japan Network. In the Ceremony, seventeen individuals and organizations from around the world were newly inducted into the Global 500 Roll of Honour by UNEP. With the attendance of Their Majesties the Emperor and Empress, about 500 people, including diplomats and leaders of various fields, attended the awards ceremony.

World Environment Day was established by the 27th United Nations General Assembly in 1972 to commemorate the commencement of the United Nations Conference on the Human Environment (Stockholm Conference) in the same year. During that conference, Japan proposed the creation of "World Environment Week," which would start with the anniversary of the opening day of the conference, 5 June. In this way "World Environment Day" was established.

*(cont'd pg.2, Global 500 Award)*



*Kunugihara sisters Mizuki and Mizue receiving the Global 500 certificate on behalf of Junior Eco-Club from Minister Kenji Manabe of the Environment Agency*

(from pg.1, Global 500 Award)

UNEP holds international World Environment Day celebrations every year around 5 June to promote worldwide awareness of the environment and environmentally-oriented actions on a global scale. The Japanese Government has designated June of each year as Environment Month, and nationally- and locally-based events such as Eco-Life Fair and Low-emission Vehicle Fair take place. This year, Japan hosts the main celebrations and the Environment Agency has given Environment Month a place as part of the World Environment Day celebrations.

The Global 500 Award is granted by UNEP to individuals or organizations in recognition of outstanding achievements in the protection and improvement of the environment, which in turn form the basis for the pursuit of sustain-

able development. The title of the award is derived from the original plan of commending five hundred individuals and organizations during the five years from 1987 to 1991. It was later decided to continue the awards even after 1991. Including this year's laureates, there have been 687 individuals and organizations to receive this Award. Japanese recipients of the 1999 Global 500 awards are two individuals (Dr. M. Numata and Prof. M. Tanaka) and two organizations (Global Environmental Action and Toyota Motor Corporation) in adult category and one organization (Junior Eco-Club) in youth category.

### **Junior Eco-Club Asia-Pacific Conference**

Environment Agency of Japan,

Tokyo Metropolitan Government, Municipal government of Minato-ku, and AEON Group Environment Foundation held the Junior Eco-Club Asia-Pacific Conference 1999 at the Akasaka City Center in Tokyo on 5 and 6 June. This conference was one of the side events of the World Environment Day celebrations.

350 members of the Junior Eco-Club in Japan and 16 delegates from China, Korea, Malaysia, Fiji, Philippines, Sri Lanka, Thailand and the U.S. joined the "Kid's Conference" on environmental issues. Posters from members of Junior Eco-Clubs, pictures sent from children in Asia, and panels showing ecological activities from all over the world were presented at Akasaka City Center. 


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## **The Basic Plan for Environmental Research and Technology**

On 26 July, based on discussions of the Central Environment Council, Environment Minister Kenji Manabe established the Basic Plan for Environmental Research and Technology Development. Recognizing that environmental research and technology development must provide one of the most important intellectual assets in the next century, this plan defines several principles, major study themes, and action plans to promote comprehensive research and technology

development in Japan during the next five years.

The basic principles behind the plan are that research and technology development should share the goals of solving environmental problems; react flexibly to changes in society and the economy; maintain interdisciplinary approach and international exchanges regarding outputs; and provide the basis for environmental businesses of the future. Besides setting out these principles, the plan submits major study themes under the following

categories: elucidation of the mechanisms of environmental changes; evaluation of environmental impacts; and measures for managing the environment. The plan explains the details of action plans for promoting comprehensive and interdisciplinary studies, training specialists, raising funds, establishing jointly used research facilities, constructing information networks including data bases, and educating the public. 

# Update on Global Warming Prevention


The Council of Ministers for Global Environmental Conservation and the Council of Ministers on Measures to Arrest Global Warming held a meeting on 2 July 1999. The Councils were briefed on greenhouse gas (GHG) emissions in FY 1997, and progress in implementation of the Outline for Promotion of Efforts to Prevent Global Warming.

## 1. GHG emissions during FY 1997

The total amount of GHG emissions from Japan in FY 1997 was 1,381 million tons (CO<sub>2</sub> equivalent), a figure which comes from the sum of each GHG emission category multiplied by its global warming potential. The amount was 8.5% higher than the 1,273 million tons of the reference year 1990 prescribed in the Kyoto Protocol. Compared to the previous fiscal year, it was 0.2% lower. The breakdown of major emissions was as follows:

- Carbon dioxide emissions were 1,231 million tons, an increase of 9.4% over 1990 levels, but a decrease of 0.4% compared to the previous year.
- Methane emissions were 1.4 million tons, a 10% reduction compared to FY1990.
- Nitrous oxide emissions were 66,000 tons, a 14% increase compared to FY 1990.
- Potential emissions of hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6) were 13,500 tons (an 18.4% increase over 1996), 2,200 tons (no change) and 2,100 tons (no change), respectively.

## 2. Progress in Implementation of the Outline for Promotion of Efforts to Prevent Global Warming

- (1) The Law Concerning the Promotion of Measures to Cope with Global Warming came into force. The Basic Policies Relating to Global Warming was approved at Cabinet Meeting. The revised Law Concerning the Rational Use of Energy strengthened the level of energy efficiency standards for automobile, home and business electrical appliances, plants, offices, houses and buildings.
- (2) The government promoted ecologically friendly cars through the application of favorable taxes and construction of methanol fuel stations, improved traffic jams using traffic information systems, and reformed public transportation systems such as subways, trams, and barrier-free 'no-step' buses.
- (3) The government held nuclear policy round-table conferences and provided benefits to areas where nuclear plants are located. In addition, the government introduced 90,000 kw of photovoltaics, 20,000 kw of wind power, and 950,000 kw of power generation from burning waste.
- (4) As for three substitute chlorofluorocarbon gases, the government took initiatives to support the efforts of the private sector in phasing out of these substances in a planned manner, develop alternatives, and conduct experiments to break down these gases.
- (5) The government promoted the measures to increase sinks by forest conservation and tree-planting campaigns.
- (6) The government encouraged the research and development of high performance industrial furnaces and lighting systems, and super-efficient photovoltaics.
- (7) The government decided to open the Secretariat of the Asia-Pacific Network for Global Change Research (APN) in Kobe. It entered into 20 contracts (243.3 billion yen) with developing countries on global warming countermeasures concerning energy-saving and new and renewable energy.
- (8) The government promoted discussion on the introduction of a daylight saving system resulting in publication of a report. It established a symbol for global warming prevention, and started the annual global warming prevention month.
- (9) The government encouraged the use of bicycles including a model project to allow bicycles to be carried onto trains, and the construction of bicycle parking lots. In addition, it promoted the use of photovoltaic facilities in school facilities.
- (10) The government took initiatives to construct environmentally conscious buildings, the wearing of lighter clothing in summer, and 'no-car days' in order to promote an environment-conscious lifestyle. 

# New Guidelines for Household Appliances Recycling

Japan has just released new guidelines to reduce the environmental impact of household electrical appliances, complementing a new related law on recycling.

On 23 June 1999 the "Guidelines for Collection, Transportation and Recycling of Specified Household Appliances," which complement the Specified Household Electrical Appliances Recycling Law hereinafter referred to as the Electrical Appliances Recycling Law. The Guidelines were jointly released by the Environment Agency, Ministry of Health and Welfare, and Ministry of International Trade and Industry. The gist of the guidelines is as follows.

## I. BASIC POLICY DIRECTION

The ultimate goal of the Electrical Appliances Recycling Law is to establish a socio-economic system with environmentally sound material cycles. To realize the goal, the Guidelines aim to transform the current system biased towards the mass disposal of waste into a new one that pays attention to reducing waste and reusing resources at each stage of the cycle, from development and production to consumption and disposal of goods.

## II. REDUCING WASTE

- (1) Users, including consumers and businesses, should use electrical appliances as long as possible.
- (2) Retailers should provide

product information which can promote long-term use.

- (3) Manufacturers should improve product durability and provide maintenance systems.
- (4) The national and local governments should support consumers, retailers, and manufacturers by promoting research and development and furnishing information.

## III. COLLECTION, TRANSPORTATION, AND RECYCLING

### 1. Collection and Transportation

- (1) Instead of just throwing away unneeded electrical appliances, consumers should bring them to retailers. Moreover, they should be aware of the costs of collection, transportation and re-merchandising, and about the collection process itself.
- (2) Retailers should avoid allowing chlorofluorocarbons (CFCs) to escape from the used electrical appliances. In addition, they should give accurate and reliable information about the costs of collection and transportation.
- (3) Manufacturers should set up stations for picking up the used electrical appliances. In addition, they should release full information on costs.
- (4) The national and local governments should support the above efforts through

raising awareness and promoting cooperation.

### 2. Recycling

- (1) The basic idea is to make efforts to recycle more materials and parts. Even when heat recovery is the alternative because of technical difficulties or costs of recycling, the manufacturers should avoid causing environmental damage.
- (2) Efforts should be made for better recovery of metals such as iron, aluminum, copper, lead in printed circuit boards, and glass in television tubes.
- (3) Efforts should be made to improve plastic sorting technology, increase the kinds of recyclable plastics available, and construct more recycling facilities.
- (4) The collection system for CFC refrigerants should be made more effective. New technology and more facilities are needed for the recovery and destruction of CFCs used for thermal insulation.
- (5) Manufacturers should conduct the proper recycling of electrical appliances, establish an adequate number of recycling facilities, develop environment-friendly products and designs, provide information about recycling, and construct a system to collect recycling fees directly from consumers.

- (6) Material suppliers should develop and supply more recyclable materials. Manufacturers that can use recycled materials are encouraged to use more recycled materials.
- (7) The national and local governments should support giving information on recycling and promoting technology development.

**IV. OTHER**

- (1) The national and local governments should enhance citizens' awareness to recognize the importance of recycling of electrical appliances for environmental protection.
- (2) Methodologies for life-cycle assessment (LCA) should be established, which take into account the environmental impact of the entire chain of material circulation, including

production, distribution, use, disposal, and recycling.


- (3) Because the effective collection, transportation, and recycling of the electrical appliances requires the wide acceptance of the "waste-maker-pays" principle, the national government should make efforts to gain public understanding and support for the Electrical Appliances Recycling Law.

**Two Laws Revised to Promote Recycling and Resource Recovery**

Two laws were revised in May 1999 in connection with the Specified Household Electrical Appliances Recycling Law. These revisions were necessary in order to deal with recyclable materials and products which are not under that law, which focuses on route that used appliances from users via

retailers back to manufactures.

In the revision of the Waste Disposal and Public Cleansing Law, procedures to dispose of household electrical appliances (air conditioners, TV sets, refrigerators, and washing machines) prescribed by the Ministry of Health and Welfare were updated. In addition, standards for the final disposal of these appliances were revised so that before going to landfill dumps, they should undergo intermediate treatment to reclaim reusable materials, etc. The Environment Agency is responsible for setting the final disposal standards.

The Law Relating to the Prevention of Marine Pollution and Maritime Disaster was also revised to require similar intermediate treatment to that noted above, when the specified household electrical appliances are dumped at a disposal site from ships. 

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## Annual White Paper on the Environment 1999

The white paper on environment, an annual report on environment for 1999 compiled by the Environment Agency, was recently approved by the Diet.

The main subject of the white paper this year is to consider environmental policies for sustainable development for the 21st century by reviewing the policies of this century. The basic idea underlined in the white paper

is that everyone involved in the current socio-economic system should make efforts with clear goals in order to greet the 21st century as the "Century of the Environment". The white paper poses challenge of achieving environmental conservation, and describes how countermeasures for environmental problems should be taken in each sector, including business, individuals, and the

international community. It also describes in detail the state of the environment in Japan, covering a number of key environmental topics.

*\* An English summary of "Quality of the Environment in Japan 1999" is available from the Office of Policy Planning and Research of the Environment Agency.* 

# Crested Ibis Chick Hatches

The population of crested ibises in Japan increased by one with the recent hatching of Yu-Yu, a baby chick. The proud parents are You-You (male) and Yang-Yang (female), two crested ibises that were officially presented to Japan by China last November, and arrived at the Sado "Toki" (crested ibis) Center in Japan on 30 January this year. At the center Chinese and Japanese experts have collaborated closely on handling and feeding the birds. Yang-Yang laid the first of four eggs on 22 April, and one hatched on 21 May.

The name for the baby crested ibis was chosen from among over 11,000 suggestions from elementary school children all over Japan. A "godparent" certificate was given to 192 groups that had suggested the winning name. The Chinese characters for Yu-Yu,



*Yu-Yu, baby crested ibis on 28 June. Photo: Sado Toki Conservation Center.*

You-You and Yang-Yang mean "excellence", "friendship" and "ocean", respectively.

It is expected that the feathered couple will lay eggs again next

year. The Environment Agency plans to continue cooperation with China, and hopes to help the crested ibis recover in the wild in Japan in the future. 🌍

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## Public Participates in Survey on Aquatic Organisms

In June the Environment Agency released a report regarding surveys on aquatic organisms conducted in FY 1997 and 1998, which provide useful indicators of water quality. This survey has been voluntarily joined by the public since FY 1984. The number of participants joining surveys by the Environment Agency was 43,000 in 1997 at 3,987 sites and 53,000 in 1998 at 4,459 sites. Since aquatic organisms such as the mayfly and river crab reflect multiple and long-term water quality conditions, participants in the survey can judge water quality

by studying the organisms found at a site in an effective, simple and inexpensive way. Based on the results of the study, water quality is classified into four categories: good, fair, dirty, and very dirty. The latest survey results produced relatively positive results, with 67% of sites being classed "good" in 1997 and 71% in 1998.

In response to increasing participation, which reflects growing public awareness, the survey method was modified this time. Although the Environment Agency and Ministry of Construction have conducted


similar surveys separately since 1984, the most recent survey was done in cooperation. In order to eliminate slight differences in survey methodology, a study group was set up to review indicator organisms and modify the scoring methods of this survey in FY 1998. The revised method will be used on a trial basis in FY 1999 and brought fully into practice from FY 2000. This newly revised method is expected to lead more people to participate and to enhance better environmental awareness. 🌍

# Wetland News: New Anatidae Network, New Ramsar Site

The Anatidae Site Network in the East Asian Flyway was launched on 14 May during the 7th Conference of the Parties to the Ramsar Convention on Wetlands held in Costa Rica. The Anatidae family includes ducks, geese and swans, an important group of waterbirds that are ecologically dependent on wetlands. The Network is a cooperative international program coordinated by Wetlands International under the Asia-

Pacific Waterbird Conservation Strategy supported by Japan and Australia. The participating countries are China, Japan, Korea, Mongolia, Philippines and Russia. Japan proposed the establishment of a network for habitat conservation for migratory Anatidae by inviting the countries located along the migratory flyways to work together. The aim of the network is to exchange information and to enhance environmental awareness of local

people in order to ensure the long-term conservation of migratory Anatidae populations and their habitats.

Regarding related topics, Manko, a 58 hectare lake in Okinawa, was added to the list of Ramsar sites this year. This makes Manko the 11<sup>th</sup> Ramsar site in Japan. A diploma was handed to the representatives of the local government on 15 May by Mr. Blasco, Secretary General of the Ramsar Convention. 


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## Revised Wildlife Protection and Hunting Law

A bill to amend Wildlife Protection and Hunting Law passed the Diet on 10 June 1999 and was promulgated on 16 June 1999. In recent years, wildlife in Japan has suffered from population imbalances. Some species of wildlife such as deer and wild boar are increasing in number, resulting in costs to the forestry industry and damage to ecosystems. On the other hand,

some species such as bears are decreasing in number, a trend which may lead to extinction. For a harmonious coexistence between humans and wildlife, scientific and effective wildlife protection programs are needed. Based on the report submitted by the Nature Conservation Council, the Wildlife Protection and Hunting Law was revised, with the introduction of a Specified Wildlife Conservation

and Management Planning System.


The aim of the plans, which are to be drawn up by prefectural governments, is to stabilize local wildlife populations in the long term. If a local population of a wildlife species increases or decreases dramatically, prefectural governments are to make plans and devise methods to conduct population control and habitat management. 

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## Better Automobile Fuel Quality

On 1 July, the Environment Agency notified an amendment of the quality standards for automobile fuels, which are based on the Air Pollution Control Law, in order to improve the quality of automobile fuels. The permissible

upper limit of the benzene content of gasoline will be 1% per unit of volume on and after 1 January 2000. Benzene is regarded as a hazardous air pollutant, even though it is emitted only in small quantity. This amendment was

followed by a revision of the Ministerial Ordinance of the Ministry of International Trade and Industry according to the Law on the Quality Control of Gasoline and Other Fuels. 

# Second Report on Dioxin Emission Reductions

In September 1998, the Working Group on Dioxin Emission Reductions began a study of measures needed to reduce the emissions of dioxins in Japan. In June 1999, the working group completed its second report, which contains an inventory of sources of dioxin emissions and a compilation of measures needed to reduce these emissions. The first report of this working group, completed in May 1997, also included a dioxin inventory.

## Dioxin Emissions Inventory

The "Basic Guidelines to Promote Countermeasures to Dioxins," adopted on 30 May 1997 at the Ministerial Council on Dioxins Policy, directed the government to complete a second dioxin emission inventory by June 1999. The Working Group on Dioxin Emission Reductions has accordingly completed a national inventory that incorporates new information obtained since its first dioxin inventory report was published in May 1997.

This second report estimates that the total annual emissions of dioxins in Japan for 1997 was within the range of 6,330 to 6,370 grams of Toxicity Equivalents (g-TEQ) and that the total annual emissions for 1998 was within the range of 2,900 to 2,940 g-TEQ.

## Measures Needed to Reduce Dioxin Emissions

The second report found that the following measures are needed to reduce dioxin emission levels.

- Full implementation of regulations and monitoring of dioxin emission reductions

To reduce emissions of dioxins to the air, through implementation of the Air Pollution Control Law and Waste Disposal and Public Cleansing Law is important. Regulations for waste incinerators and steel plant electrical furnaces should be strictly enforced. The levels of emission reductions should be monitored and quantified. The national inventory should be revised each year.


- Promotion of emission reductions by unregulated sources

This inventory includes both regulated (e.g. waste incinerators and electrical furnaces at steel works) and unregulated sources of dioxins. Among these unregulated sources, there are ones which have relatively large dioxin emission levels (e.g. small waste incinerators and industrial sources like sintering processes at steel works). The reduction of emission levels at these sources should be emphasized. Based on the latest scientific knowledge and the emission survey results, the countermeasures for dioxins discharged to water need further study.

- Measures for coplanar PCBs

A national inventory of coplanar PCBs should be prepared by gathering scientific information, and collecting data. Besides dioxins, the reduction for coplanar PCBs should be promoted.

- Improving data reliability

In order to ensure precise and reliable data, further study is needed to establish a system for quality control and quality assurance (QC/QA) of data by the third parties besides an in-house QC/QA at laboratories. 

*For more information about events and articles in JEQ please contact the Global Environment Department.*

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## October

13-15 The 2nd Session of ESCAP/Committee on Environment and Natural Resources Development (Bangkok)

25-Nov. 5 The 5th Session of the Conference of the Parties to UNFCCC / the 11th Session of SBSTA/SBI of UNFCCC (Bonn)

## November

14-17 Northeast Asian Conference on Environmental Cooperation (Maizuru, Japan)

15-26 The 3rd Session of the Conference of the Parties to CCD (Recife, Brasil)

29-Dec.1 OECD/Environmental Policy Committee (Paris)

## December

9-11 International Symposium on Environmental Endocrine Disruptors'99 (Kobe, Japan)

## Year of 2000

February G8 Environmental Futures Forum (Hayama, Japan)

April G8 Environment Ministers' Meeting (Otsu, Japan)

May International Symposium 2000 on Groundwater, IAHR (Omiya, Japan)