

The Newsletter of the 20% Club for Sustainable Cities

Introduction of New Member Local Governments

In this edition, we will first introduce two new members – one Japanese and one foreign – who have newly joined our club.

The first new member is Ratnapura City of Sri Lanka. Ratnapura City, with a population of 63,000 people, is situated in southern Sri Lanka and is famous for its jewel production. The city has raised as its target areas, solid waste management, composting (composting raw waste) and recycling waste.

The second new member is Japan's Minamata City. The city's name is already widely known abroad; please refer to "20% Club Case Study Vol.5", which will be published simultaneously with this newsletter for an introduction of its environmental programs.

Outcomes of the Survey on the Status of the Progress of Measures

First allow us to thank those members who were cooperative in the "FY1999 20% Club Survey on the Status of Measures" undertaken by the secretariat.

A list of numerical targets and the status of the progress made towards the targets is introduced on the following pages.

The number of members who reported to the secretariat was 35 Japanese local governments (out of the 37 surveyed; response rate at 95%) and six foreign local governments (out of the 20 surveyed; response rate at 30%).

Vol.6 March 2000

Note: The newly admitted local governments mentioned above are not included in the survey.

Each member has been taking diverse innovative measures in various areas. It can be noted that many member local governments have shown great concern for waste management.

Most Japanese local governments -32, to be exact - who reported to the secretariat raised numerical targets for reuse of waste materials and reduction of waste disposal.

Member local governments have taken such as measures as the promotion of the subdivision of waste types (e.g. segregation of PETs and glass bottles, etc.) and the promotion of a subsidy system for the purchase of the composting equipment of raw waste, the diffusion of which is sought. It appears that, generally, members are steadily achieving their numerical targets.

However, the fact that the improvement of the mass production / mass consumption system that lies at the bottom of these issues are much beyond the powers of the local government has, after all, what complicates matters.

We hope that the information launched by this club, a wide network among regions, will support the resolution of issues faced by each member and expect active traffic among our members. (Secretariat)



Outcomes of the Surveys on the Status of the Progress of Measures

Name of Local	Target	Progress in achieving targets
Authority	i mget	rogeoso in denoting dirgets
Abiko City, Japan	• By the year 2000, 10% reduction of household waste, 20% reduction of office waste, and 35% of waste recycling will be achieved.	 For "domestic waste," promote composting of domestic garbage and give guidance in municipalities about waste sorting (five times a month). For "industrial waste," conduct activities focusing on guidance in sorting collections. [The goals mentioned on the left are expected to be achieved by the end of 2000. Target rate for recycling by 2010 will be 45%.]
Chigasaki City, Japan	• 20% of waste volume will be reduced and 20% of waste will be recycled in 5 years from FY1997.	 Promote PET bottle collection in model areas Promote sorted collection and recycling with thorough introduction of transparent/semi transparent wastes disposal bags. Start planning the "2nd Sorted Collection Plan" based on enforcement of the Household Electric Appliance Recycling Law. [Progress: 12%]
Ebina City, Japan	 Introduce low pollution car, designated by 7 local authorities, to cover 20% of official car. Recycle 20% of collected household waste every year. 	 Based on the comprehensive plan established in 1996, promote the replacement of old cars with low-pollution cars at the time of renewal [AS of April 1999: 57 cars (31%)] Start the PET bottle recycling in April 1998. [Recycling rate as of the end of FY 1999: 22.5%]
Fujisawa City, Japan	• 20% reduction in process required waste	 Grant subsidies for the purchase of home-use garbage dispose equipment. Certify stores promoting waste reduction. Give guidance in waste reduction to large-quantity industrial waste producers. Increase the frequency of recyclable waste collections from once a month to twice a month. Introduce semitransparent waste disposal bags. Collect PET bottles throughout the City pursuant to the Law of Promotion of Sorted Collection and Recycling of Containers and Packaging. [Introduction of semi translucent wastes disposal bags resulted in 4-5% decrease for flammable wastes, 2-3% decrease for nonflammable waste, and 14% increase for recyclable waste in FY1998 (compared to the FY1999). The figures, however, have been

35 Japanese Local Authorities (As of September 1, 1999)

Newsletter Vo.6



		stable following these achievements.]
Name of Local Authority	Target	Progress in achieving targets
Gumma Prefecture, Japan	 20% reduction of CO₂ emissions per capita by the year 2005 from the 1990 level. Enhance the waste recycling to reach the more than 20% level by the year 2000. 	 Some activities are underway pursuant to the "Regional Action Plan against Global Warming (CO2CO2 Plan)" prepared in March 1998. [Achievements rate is not available at present] Establish the Zero-Emission Information Network on the Gunma Prefecture Government website to provide information. Create a subsidy system to promote zero- Emission activities, mainly aimed at small Businesses. [General wastes recycling rate in 1998: 13.5%]
Hadano City, Japan	• Recycle 13% of total waste in the year 2000.	 Promote sorted collection of recyclable bottles, collection of milk cartons and food trays at designated venues such as citizen halls, subsidies for home-use garbage disposal equipment. [As of the end of 1998: 10.4%]
Hayama Town, Japan	• 20% of collected waste will be recycled every year.	 Promote activities, including sorted collection of plastic waste for recycling. Endeavor to complete sorted collection throughout the Town during 2000. [As of the end of 1998: 10.1%]



Hiratsuka City, Japan	 10% of estimated annual household waste which equals to 6,200t will be reduced. Reduce Dioxin level to the 50% or less level of emergency measurement value, 80mgTEQ/Nm³. Expand the municipal park area per capita to 8 m² from 4.16 m². 	 Promote the use of garbage disposal equipment and PET bottle collection. [Progress: Decreased by about 9%] [Achieved](This is partly due to more strict numeral targets than the figures on the left established pursuant to revision of the law after membership to the 20% Club) [As of April 1999: 4.34m²](Hiratsuka City Government, however, later corrected this Target figure to [9m²])
	• Increase greening ratio of public facilities by 20%.	 This is partly due to more strict numeral targets than the figures on the left established pursuant to revision of the law after membership to the 20% Club.
Name of Local Authority	Target	Progress in achieving targets
Iida City, Japan	 Reduce total waste disposal in 2000 by 7% and 14% reduction of estimated waste will be achieved. 26% or more of collected waste will be recycled in 2000. After 2000, the surplus power consumption from the 1994 level is expected to be covered by natural energy. Solar energy water boiler is expected to be diffused by 25% in 2000. Solar power generation facility construction is expected to be popularized by 1% in 2000. Control the usage of purified water amount in 2000 to be the average level between the year 1990 and 1994. More than 30% of main routes will be the area of tree planting in 2010. Improve the water quality to reach the adequate level for small creatures' habitat. Set the standard noise level of residential area within the target of city planning as 50dB in the daytime, 45dB in the morning and evening and 45dB at night. Odor concentration level is expected to be 20 in industrial area. More than 2/3 of residential area is expected to be satisfied with living environment in the year 2010. Improve the awareness of citizen toward the environmental activities in 2010. 	 [1998: increased by 13%] [1998: 23.3%] [1998: 3% of electricity consumption (exceeding the figure in 1994) was secured using electricity supplied by new resources.] [1998: 34%] [1998: 0.59%] [1998: 312 liters (exceeding the target figure, i.e. 290 liters)] [1998: 25.2%] [] [Measured at 8 points in the city in 1998: The achievements differs from each measurement points/times.(Overall, well- achieved.] [1998: Goal was achieved in all the measurement points.] [Answers for the 1998 questionnaire: 53% of respondents are satisfied with the environment.] [A questionnaire consisting of 12 items was given about what kind of action the citizens



-

		take for ecology-oriented living.]
Kaisei Town, Japan	• Maintain more than 20% recycling rate every year by implementing waste volume reduction and recycling.	 Decrease the frequency of collection of flammable waste from three times a week to twice a week. Increase the frequency of collection of recyclable waste from three times a month to four times a month. Continue use of a designated flammable waste bag. Promote a campaign for bringing one's own shopping bag by working with stores encouraging simple packaging/wrapping. Introduce a subsidy system for establishing household garbage disposal equipment. Disseminate the use of composting equipment Make the citizens aware of sorting waste collections, subject to the Law of Minimum Packaging and Recycling. [The goal is being achieved: 20.8% in 1997, 20.2% in 1998]
Name of Local Authority	Target	Progress in achieving targets
Kamakura City, Japan	 20% reduction of waste. 20% recycling of waste. 	 Issue the "Kamakura Declaration to reduce waste by half" in November 1996, and began comprehensive sorting (in 5 categories) in 1997 [As of 1997: 24.2%] Establish the resource-recycling base in 1997 to sort resources and to act as a base to promote awareness. Promotion is underway on a project to use pruned branches as compost. [As of 1997: 36.6%]



Kanagawa Prefecture, Japan	 Prefecture managed forestry in the water supply source area will be expanded to 12,000ha in 5 years from 9,200ha in 1997. BOD will be reduced by 20% from 1995 level by 2002. Reduce water quality related problem by 20% from 1995 level.(118 in 1995.) Increase the permanent green area in the prefecture park by 37% than that of in 1996 in 5 years. 100% recall of HCFC used products Introduce low pollution car to reach 20% of the entire number of prefectural government official car in 5 years starting from 1997. Implement the measures for nighttime transport noise pollution to the 20% of the entire target lines. Increase the waste volume to be recycled by private sector to 15,100t from 12,591t in 1995 level in 5 years by encouraging and facilitating the recycling. 	 BOD as of 1997 is 70kg per day, reduced by 11% In 1998, water pollution cases eventually Increased to 156. This figure is mainly Attributed to natural factors. Therefore, it is necessary to specify the causes as well as take countermeasures to prevent such cases from happening again. [As of the end of FY 1999: Increased by 11%] [The HCFC collection rate from disposed cars is 100%. A future issue is to increase the number of cars collected.] [As of the end of FY 1999: 137 cars (introduction rate: 8%)] [Implemented on four roads in 1997 and 1998, representing 15%] [Exchange rate in 1998: 2,344 tons] (Law revision resulted in the increase of
Kawaguchi City, Japan	• 20.1% of waste recycling, before intermediate process, is expected to be achieved.	Establish a section exclusively in charge of giving guidance for waste production. Preparation of the "Guidelines for Using Recycled Products: Step 2" is underway to promote recycling of construction materials. [Recycling rate in 1998: 14.4%]
Name of Local Authority	Target	Progress in achieving targets



-

Kawasaki City, Japan	 Increase the recycling rate by 20% in 5 years from 1995. Introduce low pollution car, designated by 7 local authorities, to cover 30% of official car. 	 Establish the "Recyclable Resources Day" on which recyclable resources are particularly collected. As of the end of FY1998, this program spread to almost all areas of the city. Sorted collection for PET bottles started in February 1999 in about 45% of the city. [1998 Achievements: Increased by 25.3%] "Guidelines for Environmental Measures for Purchase, Usage, and Management of Official Cars for the Kawasaki City Government Personnel" was enforced in March 1998. [As of the end of 1998: 8.9%]
Kohchi Prefecture, Japan	• Increase the prefectural natural park areas to cover 5% of the entire prefectural area in 5 years by 2001.	• [As of December 1998: 4.6%]
	• Increase the forest area from 176 ha to 2,400 ha in 5 years by 2001.	ullet [Estimates as of the end of FY1998: 319ha]
	• Sewerage system will cover 30% of the population in 5 years by 2001.	• [As of the end of FY1997: 19%]
	• Raise the waste recycling rate to 20% in 5 years by 2001.	• [FY1996: 8.5%]
	 Regarding BOD/COD in public waters, raise the achievement ratio to reach environmental quality standard to 85% in 5 years by 2001. 	• [FY1997: about 76%]
Komoro City, Japan	• 40% of waste will be recycled.	 Start sorted collection of cans and bottles in April 1997. [At present: about 30%]
Manazuru Town, Japan	 Reduce the ocean discharging of urination to 16.34kl/day in 2001 from 18.15kl/day in 1995. Encourage the installation of integrated purification equipment and 12 equipment will be installed in 2001. 	 [As of 1998: night soil disposed17.66kl per day (Achievements: 20%)] [As of 1998: 4 units (Achievements: 25%)]
Matsuda Town, Japan	• 20% of collected waste will be recycled every year.	 Start collection of bottles sorted in five colors, as well as collection of paper waste, PET bottles, and food trays. Promote subsidies for garbage disposal equipment. [Achievements:About 60% (this figure, however, differs among different kinds of waste.)]
Minami Ashigara City, Japan	• 20% of waste will be recycled.	 1997 Start sorted collection of PET bottles and plastic trays 1999 Promote recycling through introduction of transparent/semitransparent disposal bags for flammable waste [Present resource recovery rate: 18.6%]
Name of Local Authority	Target	Progress in achieving targets



Nakai Town,	\cdot 20% of collected waste will be recycled every	Promote subsidies to the composting and
Japan	year.	garbage disposal equipment, collection of
		clothing/fabric, PET bottles, and styrofoam.
		[As of 1998: 23.1%]
Ninomiya	\cdot 20% recycling rate will be achieved by waste	\cdot Promote the use of waste disposal bags
Town, Japan	volume reduction and recycling.	designated by the town.
		 Promote thorough reduction and sorted
		collection of general industrial waste.
		Promote sorted collection of items subject to
		the Law of Promotion of Sorted Collection and
		Recycling of Containers and Packaging.
		 Spread the garbage disposal equipment. [As of September 1999: 25.7%]
Noda City,	• By the year 2000, 27.4% reduction of household waste and 37.1% reduction of office	• Introduce the waste disposal bags designated by
Japan	waste will be achieved to reach 30.3% of the	The City. 130 bags per household were supplied Free of charge. When people run out of these free
	overall waste reduction.	Bags, the government requires that they purchase
		Additional bags, which are costly. People are not
		Inclined to buy expensive bags by themselves,
		And this has caused a decline in waste reduction.
		[Progress: The goal has already been achieved
		(97%). Countermeasures, however, should be taken
		because waste began to increase again after reaching the
		goal.]
Odawara City,	\cdot Introduce low-pollution cars in the City, 100	ullet Establish the Odawara City low-pollution
Japan	cars by 2001, then 10,000 cars by 2010,	Car Promotion Plan. Approaches based on
	including the private sector.	this Plan are underway; i.e. subsidies for
		purchase, reduction of or exemption from
		parking charges, and rent-a-car service for
		low-pollution cars. [60 cars at present]
	• Proceed the waste volume reduction by	• Promotion activities include sorted
	recycling and sorting collection of ordinary	Collections (15 items in 9 categories),
	waste, and 20% of total waste will be recycled.	development of recycling centers, and talks
		throughout the municipalities.
		[24.7% achieved as of 1998]
L		
Ohi Town,	\cdot 20% of collected waste will be recycled every	\cdot Subsidies are given to organizations engaging
Japan	year.	in recycling activities. Make the citizens
		aware of sorted collection of resources.
		[1998: 23.4%]
L		



Name of Local Authority	Target	Progress in achieving targets
Oiso Town, Japan	• More than 20% of waste will be recycled by the year of 2001.	 Recycling promotion is underway, including Increasing the number of categories for sorted Collections. Commence the Recycling Cooperation System in Cooperation with companies and citizens (e.g. Simplify packaging/wrapping and bringing one's own shopping bags). Possible measures in the future include handling of items subject to the Law of Promotion of Sorted Collection and Recycling of Containers and Packaging and introduction of a subsidy system for electric garbage disposers. [70% at present: the goal has already been attained]
Okayama City, Japan	 Raise the waste recycling rate to 19.1% by 2010. 84% of waste water will be treated by 2010. Sewage system will cover 70% of the population in 2010. Expand green areas per capita in urban facilities to 58.88m² in 2015. 	 Increase in the number of collection points of PET bottles [FY1998: 11.6%] [Present population covered by general waste disposal service: 41.7%] [Percentage of people using sewage system as of the end of FY1998: 38.2%] [Park and green area per capita as of the end of FY1998: 7.7m²]
Sagamihara City, Japan	 Increase the municipal park area by 20%. Reduce the pollution burden of rivers by 20%. 	 Establish the "Basic Green Plan." [As of the end of 1999: Increased by 13.2%] Development of public sewage system is underway. [95.1% of Japan's population is provided with public sewage system services as of the end of FY1998. Increase compared to the figures as of The end of FY1994: 16.1%]
Samukawa Town, Japan	• More than 20% of waste will be recycled by implementing thorough sorting collection	 Sorted collection, introduction of waste Disposal bags containing calcium Carbonate, collection of cooking oil waste, and PET bottle collection following enforcement of the Law of Promotion of Sorted Collection and Recycling of Containers and Packaging in 1998. [Achievement goal: 88%]



Name of Local	Target	Progress in achieving targets
Authority		1 1051 055 in demoving targets
Sendai City, Japan	 20% increase in level of knowledge of creatures by the year 2010. Stabilizing CO2 emission at the level of 1995 in the year 2010. 	 Consistently improve the approaches as: Prepare a map of the fauna of the area. Promote experience-oriented environmental education. Administer the program for preparing the biotope creation guidelines. [Recognition surveys are conducted every five years for verification (next survey will be conducted in 2001.)] Promote Sendai Environment-oriented Action Plan. Develop the "Stop Idling" campaign. Promote introduction of New enrgy project. Introduce low-pollution cars. [Achievements are to be surveyed at a certain before the year 2010. (Environment-Conscious vehicles introduction rate has already reached 10%, and the anticipated goal is to be reached
	• Raise the waste recycling rate to 30% in 2010 from 16.4% in 1995.	 in three years.)] Promote collection of recyclable waste by community groups and children's groups. Promote the campaign to improve public awareness for waste reduction and recycling campaign. Promote the spread of composting containers. Prepare the basic plan for general waste disposal. Collect paper waster produced by city facilities. Take countermeasures to reduce amount of garbage. [Achievements are to be surveyed by 2010. (Resource recovery rate in 1998: 16.9%)]
Setagaya Ward, Japan	• Increase the recycling activity by 20% compared to the level of the previous year.	• Regarding the expansion of areas undertaking the Collection of sorted recyclable resources, the Proportion of households complying with this Practice is expected to reach 100% by the fiscal Year end of 1999. Recycling rate in 1998 is 4.6%. [However, figures for the current recycling rate are not available.]
	 The total length of hedgerow will be longer by 80% than that of in 1993 by 2001. 20% more low pollution car will be registered in the ward than that of in 1993 by 2001. 	 Support for developing hedgerows. Give guidance in setting up green areas adjacent to roads during construction planning. [Greening rate: 41.2%] No answer available
Yamakita Town, Japan	• More than 20% of waste will be recycled by sorting collection and recycling.	 Promotion of sorted collection pursuant to the Law of Promotion of Sorted Collection and Recycling of Containers and Packaging is underway. [The goal was already achieved.]
Yamato City, Japan	 (Targets to be achieved in 2010, compared to the figures as of February 1998) 20% reduction of use of electricity in the City Office. 20% reduction of use of electricity in a sewage treatment plant. 20% increase in general wastes recycling. 20% increase in green lands. 20% increase in installation of cisterns in 	 Promote turning off the unnecessary Lighting and modifying the temperature for air conditioners. [No progress at present] [No progress at present] [As of the end of FY1998: 15.6%] [As of the end of FY1998: 19.6%] [1998: All newly constructed residences are



Name of Local	Target	Progress in achieving targets
Authority		
Yokohama City Japan	• Reduce electricity consumption of business sites by about 10% compared to the 1997	Promotion is underway including employing a person in charge within each district. • [Increased by 0.5%]
	• Reduce fuel consumption of official cars by about 10% compared to the 1997	 [Decreased by 0.1% for gasoline and 28.6% for light oil]
	 Reduce paper consumption of official use by about 10% compared to the 1997 Increase paper recycle rate within the produced waste by about 10%compared to the 1007 achievements 	 [Increased by 15% for paper for copiers and decreased by 27.4% for paper for OA equipment] [Decreased by 1.5%]
	 the 1997 achievements. Increase the use of recycled paper for printed matters by 10% compared to the 1997. Achieve 100% for recycled paper for copiers. 	 Promotion is underway including employing a person in charge within each district, as well as setting the guidelines for purchase of office consumables. [Decreased by 1.4% for paper for printed matters and increased by 0.4% for paper for copiers]
Yokosuka City, Japan	• Raise the waste recycling rate to 32% in the year 2000.	• Promote resource recovery activities such as periodical collection of recyclable waste (cans and bottles) throughout the City and provide guidance to community groups.
	• Increase the volume of waste water treatment by 20%.	 [As of the end of 1998: 12.7%] Promote installation of integrated purification equipment (imposed as an obligation in principle) in the areas where there are no sewage systems as well as giving subsidies for part of installation expenses. [Night soil disposed: 14.9% Sludge from purification equipment: 11.1%]
	• Increase the number of street trees by 20%, compared to 9,048 as of the end of FY1993.	• [To date, 1,424 trees have been planted. The number of trees planted is expected to rise
	 Extend hedgerow by 20% up to 4,680m. Increase total greenery area of parks by 20% 	 to 1,528 by the end of 1999 to achieve 20%.] The goal has already been achieved.] [Present: Increased by 3.2%]
Zama City, Japan	• Increase the number of low pollution cars, designated by 7 local authorities, among official cars by 20%.	 Official cars of local authorities will be gradually replaced with low-pollution cars at the time of renewal. [Progress: Increased by 22.6%]



Name of Local Authority	Target	Progress in achieving the targets
Puerto Princesa, Philippines	 Under Puerto Princesa Watch Program (1992) Eradication of destructive methods of fishing (100%) Eradication of logging and slash-and-burn farming.(100%) Physical delineation of forest lands through actual surveys and planting of special trees to identify the delineation.(75%) 	 Under Puerto Princesa Watch Program (1992) City waged an anti-illegal fishing campaign in its four strategic bays in success, having fishermen realize the meaning of it. City patrols along bays and arrests illegal fishing boats. [City's forest cover increased by 2088ha within a six years from 1992-1998 by the success of the Program] The actual survey has been 100% completed and through the survey, land use has been classified into zones(core/ buffer/ multiple-use) [The planting of special trees to delineate the
	 Introduction of alternative livelihood technologies to farmers and fishermen.(75%) 	 boundaries between forest and private lands is ongoing] As of Dec.1998, the City has already released more than US\$750,000 for the purpose.
Kirovo- Chepetsk, Russia	• By the year 2001, reduce polluting substances discharge by 30% of the 1991 level	 Under the Ecological Program for Environment Improvement in Kirovo-Chepetsk for the Period up to 2000(1992) In 1993 City established discharge quotas for definite enterprises and terms of maximum admissible level to be achieved. In 1993 City has created additional item for monitoring of atmospheric air quality. Since 1996 in the city use of ethiled petrol is forbidden. [As of 1998, 62% compare to the 1991 level]
Mbale, Uganda	 Increase area covered by Municipal Waste Collection and Disposal service from present 9km² to 18km² in 5 years. 	 Division budget increased in the area of waste collection and environment. Educated residents to participate in waste management. [Area covered increased from 9km² to 12km²] [Project is progressing well except for hiccups due to financial constraints]
Kyonggi, Korea	 Reduction and recycling (law) waste 250T per day of law waste will be treated in the year of 2001. 	 In FY1998, Provincial government expanded The area and so increased the number of Target facilities those are to reduce its law waste emission. (10774 were newly appointed) Expanded the areas undertaking the Collection of sorted waste, etc. [827T per day is currently treated (Already achieved the numerical target)]