

# *Steps toward Our Sustainable Cities*



Papers presented to 20 % Club first meeting in Yokohama, October 26, 2000

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## Approaches for establishing partnerships in each phase of policy planning, implementation, and review

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### 1. The current status of the Basic Environment Plan and recent trends in municipalities (cities, wards, towns, and villages)

- (1) The Plan has been completed in a total of 153 municipalities across Japan as of March, 1999 => Increased to 235 as of March, 2000
- (2) In most municipalities, citizens participated from the planning phase (in some cases a Citizens' Conference on Environment was held, with participating citizens taking the initiative in planning)
- (3) Establishment of focal measures and major programs
- (4) Progress management based on environmental indicators (Comparison of target values with achieved values => Setting issues to be addressed in the next year)
- (5) Establishment of a framework for promotion within the agency (a general coordination structure)
- (6) Introduction of the PDCA cycle into the progress management of the Plan (under planning by governments; the most advanced in terms of progress management and evaluation)
- (7) Interfacing of the Basic Environment Plan and the Environment ISO as its promotion tool
- (8) Preparation and releasing of an "Environmental Report" separate from the White Paper on the Environment (the current status of the local environment)
- (9) Starting up of a local organization for promoting the Plan (partnership organization) and cooperation with the promoting organization in the agency
- 10) Development of an environment action plan and a global environment conservation (local) action plan that materializes the Basic Environment Plan through efforts by the major actor in the region or by a partnership

### 2. Points to be addressed in the Basic Environment Plan

- (1) Only a few citizens participate from the establishment phase of the environment basic regulations upon which the Basic Environment Plan is developed => The structural part of the regulations such as the basic principles, information disclosure, progress management, promotion organization, and the basic course of action, are worked out under the direction of the government (controlled participation).
- (2) The vision (an ideal image of the environment) appears so abstract and idealistic that it turns out to be a sort of advertisement copy.
- (3) Measures that appear to cover too much (its nature as the general environment plan in the region may be the cause of this).
- (4) Listing up of less innovative measures; Irritancy for being unable to

go so far as to realize individual projects

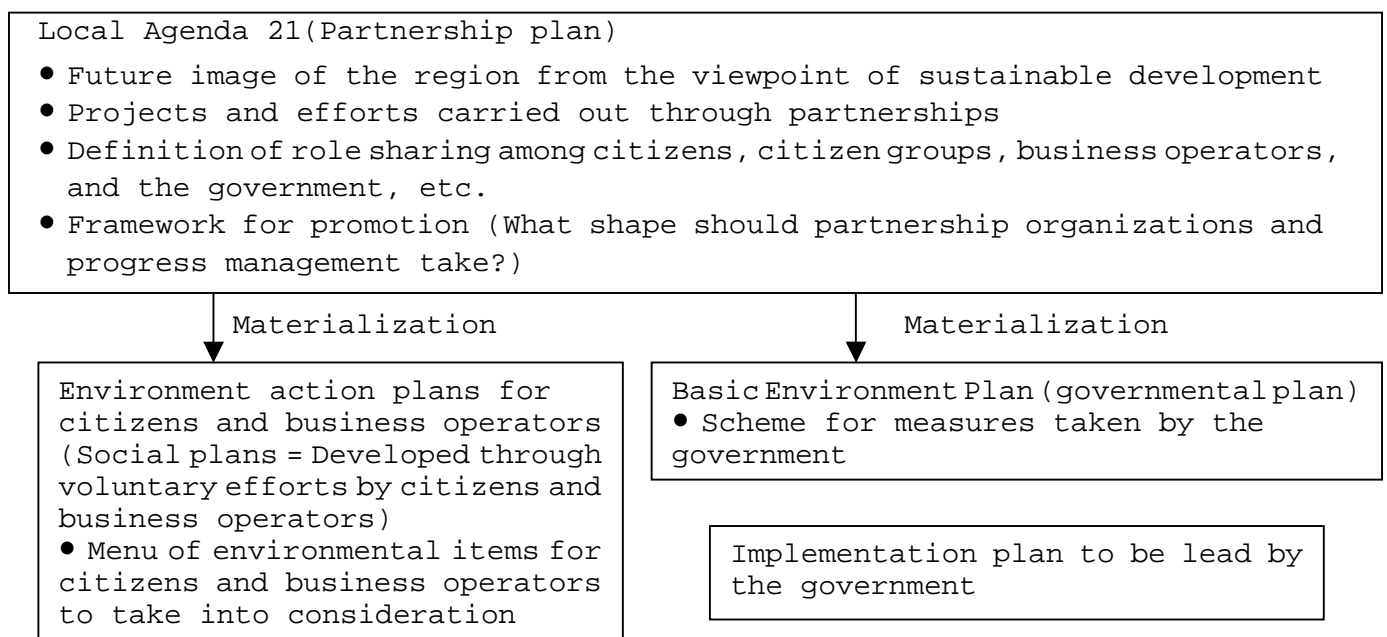
- (5) The effort towards appealing to "the local individuality" has made their visions emotional. No individuality is shown in the lower level of basic principles, basic policies, and basic measures.
- (6) Mismatch between the vision/basic principles and individual measures (programs) in content and procedures.
- (7) We cannot tell what effect has been brought about by the listed measures and efforts for improving the 'status' of the environment (for example, the reduction of green effect gas exhaust within a local government). No priority has been given to measures from the viewpoint of their effect on attaining a target value.
- (8) Increased routine measures for citizens' participation (in particular, the operation of workshops by facilitators)
- (9) Selection of the Environment Council members and consultants without inviting the input from the opinions of the general public.

### 3. Proposals (draft)

#### 3-1 (Planning phase)

- (1) Can the Basic Environment Plan developed by the government be the guideline for efforts through the partnership of citizens, business operators, and the government?
- Should we not give priority to Local Agenda 21 since it is a partnership plan? (See the following figure for the relationship between Local Agenda 21 and the Basic Environment Plan and the environment action plan, etc.)

The system of the local environment plan under Local Agenda 21



(2) Now it is the time to abolish the current status of vertically independent plans corresponding to national laws and to promote coordination and cooperation between plans at the municipality level. In particular, as long as "town building" and "environment" are in close relationship, it is necessary to seek for an integrated approach to planning through Local Agenda 21, the Basic Environment Plan and the Master Plan for City Planning. (Ishikari City, Hokkaido Prefecture: Three plans of the Basic Environment Plan, the Green Basic Plan, Master Plan for City Planning are being integrally developed based on the proposals and views of the Citizens' Council for Three Plans. Nagaokakyo City, Kyoto Prefecture: The division responsible for the next General Plan and the Master Plan for City Planning, which are still under development, participated in the Nagaokakyo Citizens' Conference on Environment.)

(3) One possible procedure for creating draft regulations: Participation of citizens from the establishment phase of Basic Environment Regulations (To what extent do citizen groups such as the Citizens' Conference on Environment take part in the consideration of regulations? To what extent should the proposals of the Conference be reflected?) => Elaboration of each major item of regulations at the Conference workshop => Development of the elaborated items into regulations by the division in charge => Check on legal consistency by external experts (different from the check by the regulation review committee or law office within the agency) => Feeding back results to the "Citizens' Conference."

(4) There may be other possible procedures, particularly for rural areas, such as engaging in "manpower building" and "framework definitions for participation," through developing individual and specific plans according to local characteristics for these to then trigger the next step; that is, to develop Basic Environment Regulations and Basic Environment Plan (Development of "Imadate Energy Vision 31 Harmonized with the Environment" by Imadate-cho, Fukui Prefecture => Development of the Basic Environment Regulations and the Basic Environment Plan => Scenario of the "application to town building.")

(5) Participation of citizens and municipal officials before selecting consultants (the Basic Environment Plan of Ichikawa City, Chiba Prefecture.)

(6) Participation in the development of Local Agenda 21 and the Basic Environment Plan offers an opportunity for people to learn about environmental issues

and for fostering local environment leaders and coordinators ("A series of Eco-city lectures by Nagaokakyo Citizens' Conference on Environment" of Nagaokakyo City, Kyoto Prefecture; Kasugai Environment Seminars by "Kasugai Citizens' Committee on Basic Environment Plan" of Kasugai City, Aichi Prefecture, etc.: association by citizens of the policymaking process and the environment learning process). However, such seminars may sometimes cause adverse effects depending on the capability and maturity of citizens and environment NGOs concerned (whether to let experts chair the conference or to operate it by citizens).

- (7) Whether the Citizens' Conference on Environment should gather "all members from the public" or to include the representatives of business operators and regional self-governing organizations? (A Conference consisting entirely of members of the public may propose more innovative targets and measures. Would it be better however to include representatives of business operators and regional self-governing organizations from the viewpoint of forming an agreement between sectors and securing the implementation and smooth establishment of the steering organization after measures have been developed?)

### 3-2 (Implementation and review phase)

- (1) It may be the best way to inaugurate a steering organization on the basis of the organization that develops the measures (Citizens' Conference on Environment, etc.) (If citizens' participation were nominal at the planning phase, it would be difficult to expect the smooth involvement of citizens and establishment of the steering organization, which follows the planning phase). However, building a partnership organization is useful even though citizens' participation was insufficient at the planning phase. (Citizens' Conference will prepare draft implementation and action plans and set target values. These issues will be described later.)
- (2) Environment action plans are to be developed in the course of proceeding with specific projects undertaken by the working team in the steering organization (Citizens' Conference on Environment of Tsukuba City, Ibaraki Prefecture) => What is the validity of an environment action plan or a guideline that takes environment into consideration but where no promotion organization exists?
- (3) Themes of the Basic Environment Plan should be narrowed down taking citizens' view into consideration ("Action Guidelines for the Basic Environment Plan

of Zushi City" developed on the basis of the draft proposal submitted by the Citizens' Workshop in which specific programs were developed by individuals or through cooperative actions regarding each of the three major issues of "Creation of city streets and green zones," "Waste problems," and "Reduction of carbon dioxide exhaust"). In addition, visible achievements should be shown through "Leading projects" and "Start up projects," which are the intensive short-term projects.

(4) Mechanism of citizen participation in progress management and progress status evaluation

- It is not enough to just publish and analyze the achievement status of environmental indicators in an annual report or in the White Paper on the Environment.

(I) Environmental report (annual report) style

- 1) Publication of an environmental report => Submission of citizens' opinions => Views of the Environment Council, etc. based on citizens' opinions => To be reflected in measures for the following year, while views of the city are stated in the environmental report of the following year (Kawasaki City and Date City)
- 2) Progress management through interaction and exchanges of views on the environmental report among the government, citizens, and the Environment Council (For example: Toyonaka City, Osaka Prefecture-one year cycle process: Interim report => Environment forum; submission of citizens' opinions => Opinions of the Environment Council => Stating the views of the city in the final report [at the end of the year])

(II) Implementation plan/annual plan development style

- 1) The working group in the "Environment Town Building Committee" (members recommended by the mayor and those recruited from amongst citizens) sets the targets and prepares a draft implementation plan for the next year (Sabae City, Fukui Prefecture).
- 2) Citizens and business operators prepare a report in the Environment Town Building Workshop, in which target levels to be achieved by the midterm are established, and submit it to the mayor. Based on this report, the city government develops an implementation plan (planning period of three years) for the Basic Environment Plan (Takefu City, Fukui Prefecture).
- 3) The government develops an "Annual Implementation Plan" and the Citizens' Council the "Citizens' Annual Action Plan" respectively. The progress status of both the plans are compared at the general assembly of the Citizens' Council (Kani City, Gifu Prefecture).
- 4) The government develops an "Annual Action Plan" => the city government reports on the progress status to the Environment Council => The Environment Council returns to the mayor an "Annual Report" on the basis of the reported progress (Citizens can submit opinions on the "Annual Report") => This is then reflected on the "Annual Action Plan" of the

following year (Tatebayashi City, Gunma Prefecture).

(III) External audit style

- 1) The Environment Partner Committee, including recruited citizen members, checks the progress status of the Basic Environment Plan. The result is suggested to the mayor (Hikone City, Shiga Prefecture).
- 2) An audit by external citizens is introduced to prepare an Environmental Report (Sendai City).
- 3) Citizens participate in preparation and editing of a 'White Paper on the Environment' (Itabashi Ward, Tokyo)

- (5) Necessity of a steering organization that encompasses all stakeholders in the region besides Environment NPOs and environment-oriented citizens' networks (Participation of regional self-governing organizations and business operators is essential). The government serves as the coordinator at the time of start up. Once the steering organization is underway, citizens and business operators will become the major players and the government will support them.
- (6) Dilemma found in environment policies of municipalities = An initiative taken by the government in making efforts (such as in acquisition of Environment ISO) seldom leads to voluntary actions by citizens and business operators. While promotion and dissemination efforts are important indeed, a more effective result will be brought about in a long run through the effort of making a mechanism that allows "active citizens, business operators, and environment NGOs" to develop creative projects in association with the government (Making a mechanism for partnership rather than dissemination and promotion activity by the government.)
- (7) Individual regulations, individual plans, and individual project levels: Change from the approach where the government develops drafts and citizens examine them, to a cooperative pattern in which a citizen group develops drafts on the basis of investigation and implementation activities, and the government completes them (the possibility of the partnership-type of municipality's environment legislation by citizens in place of direct action. Draft Ordinance on Clean-up Campaign of Kamakura City).

## Case 1: Setagaya Ward

### Environmental Management System in Setagaya Ward - a Method of Environmental Impact Assessment

Satoshi TAKADA, Environment & Disasters Countermeasures Department, Setagaya Ward, Japan

#### 1. Environmental measures in Setagaya Ward

Setagaya Ward has drawn up its basic environmental plan and leading action plan (the environmental action guide), established the Setagaya version of the Environmental Management System and promoted other environmental measures as shown on a separate page. In 1997, we published "The Basic Environmental Plan and Environmental Action Guide: The First Assessment and Inspection Report" to evaluate the Ward's environmental measures and environmental action approaches. Based on the outcome of the assessment and inspection, we reviewed the basic environmental plan and drew up the revised basic environmental plan in 2000.

In addition, with consideration for the draw-up of the global warming prevention plan, we have been working to enhance the environmental management system with the aim of acquiring ISO14001 certification in 2001.

We are currently carrying out a survey to collect basic data for the environmental impact assessment. These data will be used to assess the environmental impact of Ward business activities. In this presentation, we will report on the basic survey methods we have to perform the environmental impact assessment and some of the issues.

#### 2. Categories of Environmental Impact Assessment

Based on existing projects, we can divide the areas of environmental impact assessment for local governments as follows.

##### (1) Environmental Impact from Daily Business Operations

Kinds of environmental impact that are caused in public every office by daily operations.

Example: Use of automobiles, Energy consumption (lighting, air conditioning, etc.), Purchasing of materials, Waste generation, Printing matter, etc.

##### (2) Environmental Impact caused by project activities



Kinds of environmental impact caused by project activities that are operated by the Ward.

- 1) Projects that would have an impact on the environment
- 2) Projects that aim for conservation of the local environment.

### 3. The concept of the environmental impact assessment methods

- (1) The effective use of the existing system.

Instead of starting a new environmental management system, we decided to use the measures, procedures and accumulated data that already exist in other sections, such as the sections in charge of facility maintenance and the treasurer's office.

- (2) Selection of the survey items

In order to make the assessment procedure more time-effective, we narrowed down the items in the assessment survey and used some of the existing data.

### 4. Environmental Impact Assessment Method

- (1) Survey items in business routine for environmental impact assessment

1) Self-checking of environmental activities in the model offices  
(Environmental Department)

Every section has a designated environmental manager who promotes environmental activities at the workplace. The managers check their own activities in the workplace based on the "environmental activity check sheet." The data from the twenty-seven model offices are collected every quarter-year.

2) Mileage on official vehicles  
(Financial Department)

The Department uses the official vehicle usage record, which is prepared as budget assessment data, to assess the environmental impact.

3) Amount of gasoline purchased  
(Vehicle subsection, the Accounting Department,)

The Vehicle Subsection in the Accounting Department purchases the gasoline for all the official vehicles owned by different sections. The Vehicle Subsection collects the data for the amount of the gasoline purchased based on the vouchers.

4) Amount of green purchases  
(Treasurer's office)

The treasurer's office makes a collective purchase for the "designated items," while every section individually purchases other items.

The treasurer's office lists the environmentally sound products out of the designated items and acknowledges the amount of the green purchases.

5) Amount of waste

(Government Office Building Maintenance Subsection and the Composite Branch)

We have to have an understanding of the amount of waste generation from the Government Office Building and the Composite Branch.

We calculate the amount of the waste generation from the Government Office Building based on a report from the waste disposal company.

The waste from the Composite Branch and other offices is treated as general waste with a fee. We purchase and place a sticker on every waste container put out for collection. We use the number of stickers to calculate the weight of the waste generation (in kilograms or tons) for the waste from these offices.

#### 6) Amount of Recycling

(Waste Reduction Department)

We have a recycle system to recycle used paper, bottles and cans in the Government Office Building. A recycling company collects the items.

#### 7) Amount of energy consumption

(Facility Maintenance Department)

Guidelines for the total cost management of public facilities are set to reduce the cost for various areas, from construction planning to maintenance of the facilities.

Every section that is in charge of facility maintenance records the consumption of electricity, gas and water in the facility maintenance and management book. The Facility Maintenance Department collects and analyzes the data.

#### 8) Printing of PR materials

(Public Relations and Public Hearing Department)

To understand and effectively control the number of PR materials being printed, we made the *Manual for the Printing Registration of PR Materials* to enforce the printing registration system for PR materials.

For matters concerning PR materials that are published by the ward government, we refer to the Record of Matters Concerning the Publication of PR Materials to obtain the information on the whiteness index, post-consumer paper content and the amount of printing.

#### 9) Amount of envelopes

(Environmental Department)

The data for the number of envelopes used are collected separately, because there was no existing data available.

10) Amount of copying and the amount of copy paper and envelope consumption (Environmental Department)

The amount of copies made was not known before, because there had been no existing guidelines for the number of copy machines and amount of copying done in the whole of the government office buildings. We performed the survey to learn the amount of copying done in all the public buildings except for the schools.

## (2) Business activities

Environmental impact assessment of business activities will be performed in cooperation with the policy measure assessment, which is being prepared with consideration for the following issues.

i) The unit of businesses: individual work task

For the introduction of the policy measure assessment, we reorganized the structure of the policy measures. We itemized the tasks into five layers, with the individual work task as the smallest unit. The five layers are: six fields, 18 areas, 82 items, 303 sub-items (business groups) and 2,398 individual work tasks.

These units will be used for the environmental impact assessment in the environmental management system. The process management will be performed in compliance with the Setagaya Ward Basic Plan and the Enforcement Plan.

ii) Effective Use of Database System

We will effectively use the "Policy Measure Assessment Support System" we developed for the start of the policy measure assessment. The data, such as the amounts in the settled accounts and budgets and numbers in various records, should be more frequently used by sharing the data among different sections.

○ Items in the environmental impact assessment by individual tasks

1) Tasks that are applicable for environmental consideration system (public

works)

Development projects conducted by the Ward that are applicable to the environmental consideration system and environmental consideration guidelines pursuant to the Basic Environmental Regulation.

2) Tasks that are legally regulated by environmental regulations

The tasks that the regulations apply to, which requires some control or report for environmental consideration.

3) Tasks that have raised a complaint in an environmental issue

Tasks that have raised a complaint in an environmental issue while being enforced.

4) Tasks that are expected to have a state of emergency

Tasks that are expected to have a state of emergency that may have an impact on the environment.

5) Tasks that are applicable to the Basic Environmental Plan

Environmental policy measures that are conducted by the Ward and are also applicable to important measures in the Basic Environmental Plan (in preparation) and Basic Measures 21.

## 5. Problems involved

1) Sharing of the information

The data are surveyed and collected by the individual section based on the request. Currently these data are not shared among the different sections. Also, the same kind of surveys have been performed repeatedly by different sections. We need to reconstruct the information systems throughout the government and to promote information-sharing for more time-effective data collection.

2) Development of the index for environmental impact assessment

While we can use numbers and prices to show the impact of government business on the environment, it is difficult to indicate the degree of environmental impact. We need other indexes to use in the environmental impact assessment for governmental business activities.

3) Compliance with the policy measure assessment

The Ward is preparing the policy measure assessment, as well as designing the environmental management system. While the environmental management

system evaluates environmental impact, we have to evaluate the whole of our policy measures from the standpoint of the government, which is responsible to improve various aspects of the welfare of the local area.

#### 4) Agreement with the ISO requirements

We have to design the environmental management system so that the system will meet the requirements for the ISO14001 acquisition. We should consider the efficient use of the existing systems in the government offices to design a new, effective system.

#### 5) Accurate data collection

Accurate data collection is difficult in some areas, such as energy consumption and waste generation. We need to find effective data collection methods by conducting sampling surveys and other measures.

## Major Environmental Measures of Setagaya Ward

-1990	Recycling of used office paper was started in the main and other government buildings. A recycle promotion leader was positioned in every division.
-Basic Environmental Regulation: Established in September, 1994. -Partial enforcement was started in April 1995.	The basic policy for environmental conservation, restoration and creation was stated. It shows that environmental policy measures are carried out in cooperation with the citizens and private corporations.  It regulates the establishment of an Environmental Committee, development projects and other systems with environmental concerns.
-Basic Environmental Plan: Drawn up in March 1996.  -Environmental Coexistence Promotion Committee: Outline was established in July 1996.	It is a holistic plan to show the direction of environmental policy measures. (Effective for ten years from April 1996) The regulations for different areas and individual plans are designed and drawn up based on the Basic Environmental Plan. The used office paper recycling project was started in all of the offices in government buildings. Recycle promotion leaders were positioned in all departments and offices. Established as a promotion system for environmental policy in government offices. Organization for communication coordination. It places the deputy mayor for environmental and emergency affairs as the chair, and all of the directors as committee members.
Environmental Action Guidelines: Drawn up in February 1997 Environmental Managers: Outline was established in June 1997.	Guidelines for environment-friendly lifestyle and business operation. An action plan, in which the Ward takes the initiative as a business operator and consumer. (The Ward's Leading Action Plan: for three years from April 1997.) Positioned in every department and office to promote the Ward's Leading Action Plan (about 380 leaders). Inspect their own offices according to "environmental action inspection sheet." Set objectives. Data collection in the model offices at every quarter-year.
The first report on the assessment and inspection: Announced in March 1998	The report on the assessment and inspection of the Setagaya Ward Basic Environmental Plan and Environmental Action Guidelines. Self-inspection for the Ward's environmental

	policy measures and the Leading Action.
Guideline for Environmental Consideration Basic Plan for Greening: Drawn up in March 1999.	<p>The participation of the citizens and private corporations in the assessment and inspection work. Announcement of the results to the public.</p> <p>It shows the specific items the Ward has to consider when purchasing materials or maintaining or constructing facilities. The Green Purchase Version was drawn up in March 1999.</p> <p>Drawn up as the "basic plan for green land conservation and the promotion of greening" for the City Green Conservation Law and as a greening section of the Basic Environmental Plan.</p>
Basic Environmental Plan, Revised Version: Drawn up in March 2000. Basic Plan for General Waste Management: Drawn up in March 2000. Transfer of waste management Promotion Plan to Reduce and Recycle Waste Materials: Drawn up in May 2000.	<p>Based on the first assessment and inspection report, new issues and standpoints were discussed, and the Basic Environmental Plan was reviewed. The Basic Environmental Plan, Revised Version, was drawn up.</p> <p>With the coming ten years of Setagaya Ward in consideration, we clarified the direction of measures for general waste management holistically and systematically.</p> <p>Carried out in April 2000 as part of the task transfer by the Metropolis-ward reform.</p> <p>It is placed as the annual business plan for recycling measures in the Basic Plan for General Waste Management. It is also placed as the "Plan for Reuse" based on Setagaya Ward Cleaning and Recycling Regulations, Article 13.</p>
Preparing to accredit ISO14001. Plan for global warming prevention actions	<p>Preparing to acquire ISO14001 (the international standard for environmental management systems) in fiscal 2001.</p> <p>During review of the Environmental Action Guideline (the Ward's Leading Action Plan), we will draw up an action plan for global warming prevention within fiscal 2000.</p>

## Case 2: Toyonaka City

### Setting Targets / Its Review in Environmental Basic Plan and Toyonaka Agenda 21

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#### 1. Legal Design for Toyonaka City's Environmental Administration

Toyonaka City boasts varied topography comprising lowlands, plateaus, and hills, and it enjoys a good amount of sunshine as the city area generally slopes down to the south. Since the Hankyu Line started its service in 1910, the city has been developed as a satellite city of Osaka City. During the period of rapid economic growth in the second-half of the 1960s and onward, the densely-populated areas in Toyonaka grew quickly. During the 1970s, the population started to grow rapidly right after the international exhibition was held at Senri New Town. Now nearly 400,000 people live in the city with an area of 36.6 square kilometers. In other words, nearly 110 people live per hectare—a densely-populated city even by Japanese standards. Since the city has a relatively long history, many families have lived in the city for a long time. Partly because these citizens are relatively community-conscious, their relations with those who have newly moved there are relatively good.

Toyonaka City enacted the basic environment ordinance in October 1995 as a new legal framework for environmental administration. This ordinance sets the framework of a basic environment plan—action agendas—evaluation—an annual report in accordance with the environmental management system of Plan—Do—Check—Action. Article 8 and Article 9 lay down a basic environmental plan and action agendas, respectively. Article 10 stipulates that the city compile an annual report on its environmental measures and that citizens' opinions about the report be heard. Article 21 says that an environmental council may express its opinions to the mayor about administrative measures.

This basic environmental ordinance has taken into account the importance of partnership among citizens, businesses, and municipal authorities in tackling environmental problems today, and Article 18 calls for coordinated action among the three parties. In accordance with this article, in May 1996, Toyonaka City set up the "Toyonaka Citizens' Environmental Congress," an organization promoting partnership among citizens, businesses, and municipal authorities, and which now comprises 150 entities from various fields. The city regards



the congress as a partnership organization involving citizens from all walks of life, as not only organizations with strong ties with the city but also NPOs and NGOs are participating.

Table-1 Members of Toyonaka Citizens' Environmental Congress

Chambers of commerce; trade associations including associations of construction firms and unions of landscape gardeners; industrial manufacturers; architects' and designers' associations; distributors; hotels; transportation businesses including bus companies, taxi companies, railway companies, and trucker associations; banks and other financial operators; hospital associations; farmers' associations; government and municipal offices; the Rotary Club and the Lions Club; PTAs and associations of principals of elementary and middle schools; educational institutions including high schools, colleges and universities; youth organizations, including boy scouts and girl scouts; public corporations and citizens' groups for welfare; women's groups, citizens' groups, and labor unions; medical associations, including dentists' associations; associations of parking lot operators; environment-related citizens' groups; environmental NGOs; others.

## 2. Formulation of the Basic Environment Plan and Toyonaka Agenda 21

The Toyonaka municipal government defined the Basic Environment Plan over a three-year period, starting in FY1996. In parallel with this move, the Toyonaka Citizens' Environmental Congress prepared Toyonaka Agenda 21 (Toyonaka Citizens' Action Plan for Protecting the Global Environment) over the two years starting FY1997, after a one-year experience of partnership. The congress set up four subcommittees, focusing on living, industry, traffic, and nature. The activity of each subcommittee, comprising 20-30 participants, was not limited to monthly meetings. The members of the subcommittees took various actions, including the promotion of household eco-account books, the eco-office campaign, the stop-idling campaign, and biotope-creation at schools. This experience was put to good use in drawing up proposals in accordance with the "action approach" method. The idea was that the members—citizens and business operators—would tend to merely end up with abstract debates if they just sit down and discuss things at meetings. After deepening their understanding of the matters in question through action, the members worked out proposals for concrete action plans. Furthermore, each subcommittee invited experts in order to avoid any confrontation between citizens and municipal authorities.

A working group of about 30 citizens participating on their own initiative and placed under the board of the congress, plays a central role in making proposals and defining activities. Before joining the working group, many members expressed their opinions about the interim proposals for the Toyonaka Basic Environment Ordinance when it was published by the environmental council in order to hear what citizens had to say. The members are actively engaged in the implementation of Toyonaka Agenda 21, saying that because citizens' opinions have been reflected in the ordinance, they share some responsibility for the enforcement of the ordinance.

The Basic Environment Plan and Toyonaka Agenda 21 have set common goals. Under the Basic Environment Plan, various approaches have been established, including:

- (1) Soliciting citizens' opinions of what the Toyonaka City should be like from an environmental standpoint
- (2) Setting quantitative goals
- (3) Performance review based on more than 100 monitoring indices

Toyonaka Agenda 21 comprises 101 proposed activities that citizens and businesses can take easily to realize the desired environment of Toyonaka City.

Table-2 Citizens' environmental visions of Toyonaka(extracts)

- A city where many citizens work and carry out steps to improve the environment at the community level
- A city where sensitivity towards marvels of nature are fostered through, for example, interaction with animals
- A city where citizens prefer walking to driving
- A city where the blessings of nature including rain and the sunlight are appreciated and put to good use in everyday life
- A city where citizens enjoy clear night skies, viewing stars and breathing deeply in the clean air
- A city where citizens can feel the scent of old history, imagining the period when *Toyotamaphimeia machikanensis*, a kind of alligator, lived.

Table-3 Quantitative targets for achieving environmental visions

- The number of participants in partnership-type activities: (yet to be set)
- Carbon dioxide emissions: 8-9% reduction from FY1990 levels per head (0.92t-c/year, per head in FY1990)
- Waste emissions (net): 3-5% reduction from FY1995 levels (151,836t in FY1995)

- Rainfall permeation rate: 0.21 (reduction to the levels of the second half of the 1970s; 0.217 in FY1974)
- Achievement rate of environmental standards: 100% (70% in FY1997)
- Percentage of green coverage: 17% (15.5% in FY1995)

Table-4 Examples of monitoring indices

The number of visitors to incineration plants, the number of seminars on environmental problems, power and gas consumption (by households and by businesses), the volume of chlorofluorocarbon collected, concentration of nitrogen dioxide, concentration of SPM(suspended particulate matter), yearly average levels of aircraft noise, traffic volumes of automobiles along trunk roads, quality of treated water, daily water supply per head, consumption of medicine, recycling rate of waste, percentage of pruned branches and leaves turned into compost, the amount of waste generated from business activities, the number of collection spots for PET bottles, the daily amount of household waste collected per head, the amount of purchased power made redundant as a result of solar power generation, the amount of subsidies for buying compost generating containers, the number of street lights installed, the area of land covered with porous asphalt pavement, the records of environmental consideration, the state of community-led cleaning activities, the number of sheets of paper used in the city hall, energy consumption by the city hall

### 3. Implementation of Plans through Interaction between Citizens and the Municipal Authorities

The implementation of the two plans—the Basic Environment Plan and Toyonaka Agenda 21—are managed through an interactive method. In this method, citizens, businesses, and municipal authorities share problems and exchange opinions while the two parties implement their respective plans, and then reflect the results of such interaction in new measures and actions.

In FY1999, municipal authorities compiled the track records of its activities carried out in the previous fiscal year in July and August (1-2). In November, municipal authorities published an interim environmental report outlining activities by the municipal authorities themselves and by citizens, and exchanged opinions between the two parties at an environmental forum (3).

#### 1. Tracking down the implementation of environmental measures

##### 1.5. Checking data reported within the city hall

2. Compilation of data and preparation of an interim report
3. Publishing the interim report and soliciting opinions from citizens
4. Evaluation
5. Feedback reflected in the following year's measures
6. Publishing the final report
7. Implementation of the following year's measures
8. Fig. 1 Procedure Flow for Compilation of the Environmental Report

At the environmental forum, members of the environmental council, city assembly members, the mayor, and other high-ranking city officials, directors of the Toyonaka Citizens' Environmental Congress, members of the working group, and ordinary citizens exchanged their proposals and opinions concerning environmental problems under the theme "waste, the natural environment, and traffic." In December, based on such exchanges, the environmental council compiled a set of proposals for measures to be taken the next year in response to the interim environmental report (4). As a cross-sectorial agency of environmental administration, the environmental management committee, which is headed by the deputy mayor and is made up of department managers, as far as possible incorporated such proposals into the measures to be taken in the next and following years (5). The committee also expressed, in its final environmental report, the basic stance of the municipal government regarding the opinions of the environmental council (6). The committee plans to respond to the opinions and questions from citizens regarding the interim environmental report in the environmental report for FY2000. See Figure-1 and Table-3.

Table 3 The flow of Toyonaka City's environmental management system

Item	Who does what
(1) Keeping track of the implementation of environmental measures	Sections in charge fill out questionnaires on environmental measures
(2) Compilation of data and preparation of the interim report	The secretariat compiles data provided by the sections in charge and prepares the interim report
(3) Soliciting and sharing opinions from citizens	Municipal authorities publish the report and solicits and shares opinions from citizens at the environmental forum.
(4) Evaluation of the implementation of environmental measures	The Toyonaka Citizens' Environmental Congress makes an evaluation at its expert committee.
(5) Feedback reflected in the following year's measures	The congress reports to the Toyonaka City Environmental Management Committee, a cross-sectorial agency headed by the deputy mayor.
(6) Preparation and publishing of the final report	The city publishes the environmental report incorporating the opinions of citizens, the environmental council, and municipal authorities.

#### 4. Communication among Stakeholders and the Role of the Local Agenda 21

In Japan, Local Agenda 21 is often regarded as the action program for the basic environment plan—an administrative plan of a given municipality, or as the same as the basic environment plan. This has something to do with the following factors:

- (1) There have been only a few cases in which citizens and business from various fields and municipal authorities together work out agendas for decision-making on an equal footing at a roundtable or other open forum.
- (2) Because the concept of management has not been fully understood, there has, until recently, been no system for evaluating the implementation of a given plan on a yearly basis, and feeding back such evaluation to the following stages.

Local Agenda 21 can serve as a management tool for the environmental policy of a given municipality that is being implemented in partnership with citizens and businesses, if the agenda is used in the following ways for creating a sustainable society:

- (1) As a tool for various interested groups in projecting the municipality's future, identifying the challenges ahead, and setting objectives;
- (2) As a process of enabling citizens to express their opinions to municipal authorities and coming to agreements together; and
- (3) As a communication tool between citizens and municipal authorities in evaluating the state of the environment and the public services provided by a given municipality.

Toyonaka City puts communication with its citizens first. To this end, the city ensures the participation of its citizens in the management of environmental policies. In an attempt to attain common goals for citizens and the municipal authorities, the city also makes use of environmental reporting, including maintaining track records for both parties.

### Case 3: Coalition of Local Government for Environmental Initiative Environmental Indicators, Common Targets among the Member Municipalities

Takahiro NAKAGUCHI, Director of Research Institute for Local Initiative of  
Environmental Policies (RILIEP), JAPAN

#### Significance of Common Targets

The first reason to hold common targets is because in the era of "Think global, act local," the number of political issues that are common among local governments has increased dramatically. Regardless of where we are located in the nation, we cannot avoid a certain amount of the influence of global environmental changes. We can therefore say that it is a common task for all local governments to modify human activities such as the consumption and disposal of resources and energy, since they all place some degree of load on the global environment.

The second reason is because we have stronger needs to manage the progress of policy measures. The environmental management system—"Plan-Do-Check-Action"—is becoming imperative to local government policy measures. Some of the small governments, however, find it difficult to maintain enough human resources, and the system has not been well established in those areas. Then an idea was brought about that the secretariat of the Coalition of Local Government for Environmental Initiative (COLGEI) should support the management of local policy progress and provide the necessary information and advice for the practices of policies.

With these reasons we decided to hold common targets among the member governments of the COLGEI, and citizens or corporations within the area, who then will work together to achieve the targets. Also, it has been decided that the Environmental Policy Research Center will know and report the progress of the achievement while accumulating the information that is necessary to carry out the activities.

## How Were Common Targets Selected?

In March 1998, the Common Targets Subcommittee was started, and in May of the same year a keynote discussion and sectional meetings were held and the establishment of common targets was approved at the Koga Conference. After the conference, earnest discussions were made about the content of the targets. The survey in August showed that the majority of the member governments wanted to have the common targets and to publish the targets in the annual report. After the discussions of the propositional targets in the Common Target Subcommittee, nine qualitative targets were proposed in March 1999. After the heads of member governments approved the majority of the proposed targets in the survey held in May, the common targets were practically finalized.

The Subcommon Target Subcommittee also discussed an indicators to evaluate the achievement progress, and in June three municipalities cooperated to carry out a pilot assessment to measure the current states. The pilot assessment was repeated with all the member governments in September. The secretariat of the Council analyzed the collected data with additional statistical data it obtained from other sources. The Committee also performed a survey for the member governments to study the current practices of the policy measures itemized in the common targets. In April 2000, the members reported the practical measures they would take in the future to realize each target, and these data were reported in the annual report. In May, the National Convention (Minamata Conference) approved the report.

March 1998

The Common Target Subcommittee was established.

May 1998

The establishment of the common targets was approved in the Seventh National Convention (Furukawa Conference).

August 1998

The survey was conducted on the establishment and reporting method of the common targets and the current practices of the environmental policy.

September 1998

The survey on the current practices of the environmental policy measures was conducted for all the local governments in the nation.

May 1999

The proposed common targets were published in the May issue of the COLGEI News.

May 1999

A survey on the proposed common targets was held for the heads of the local governments.

June 1999

A pilot assessment was conducted with the current status values for Kamakura City, Futatsui Town, and Yasuzuka Town.

September 1999

An assessment on the current status value concerning the common targets was conducted with the member governments.

November 1999

A status survey on the creation of environmentally friendly township was held on request from Minamata City.

April 2000

A survey was conducted on the practical measures the members would take for the realization of the targets.

May 2000

The common targets were approved at the Minamata Conference.

### How Do We Manage the Progress of the Common targets?

Although no numerical target was set, the indicator to measure the achievement of the common targets was decided. Learning and analyzing the indicator annually numerically manage the progress. As for the indicators that individual governments cannot obtain, the council secretariat will independently collect and analyze the statistical data. Each member government will report to the council secretariat on the annual progress of practical measures they have taken to realize the common targets. These will be reported in the annual report of the council.



## The Construction and Progress Management of the Common targets

1. The Layers of Targets
2. Decision-making Process
3. Progress Management
4. The Common targets in the Nine Fields (qualitative)
5. The discussion at the Common Target Committee. The final approval at the Minamata Conference.
6. The indicator used to measure the achievement of the common targets.
7. The discussion at the Common Target Committee. The final approval at the Minamata Conference.
8. Each member government reporting to the secretariat of the numerical information. Or analysis by the Committee secretariat based on the statistical data.
9. Practical Measures to realize the common targets
10. Independently decided by each member government. Report of the result to the Committee secretariat.
11. Report of the achievement progress to the Committee secretariat by each government.

## Common Targets of COLGEI

### 1. Global Environment

We will contribute to prevent the global warming through energy conservation and introduction of environmentally sound energy sources.

[Achievement indicator: The amount of carbon dioxide emissions (electricity consumption) throughout the local area. The amount of energy consumption on business activities at the government buildings.]

### 2. Air Pollution

We will prevent the air pollution to maintain the health of citizens. We promote alternative transportation systems that are more environmentally sound.

[Achievement indicator: The ratio of automobiles to the total transportation system (major cities only).]

### 3. Water Environment

We will maintain and improve the water quality. We preserve and restore the clean environment in and around the water bodies.

[Achievement indicator: The percentage of wastewater treatment from the

households.]

#### 4. The Natural Environment and Hydrometeorology

We will conserve and create green areas in our neighborhood. We conserve and recover the natural water cycle. We will nurture the industry that efficiently uses natural resources while maintaining the public functions of the forests and agricultural fields.

[Achievement indicator: The percentage of the green areas. The percentage of abandoned agricultural fields. The environmental conservation functions, such as air purification function, flood prevention function and soil erosion prevention function.]

#### 5. Waste and Resources

We will reduce waste and promote the effective use and recycling of resources.

[Achievement indicator: The per-capita percentages of incineration, land filling and recycling of general waste.]

#### 6. Harmful Chemicals

We will control the use of materials that can be the source of harmful substances. We will control the generation of harmful chemicals.

[Achievement indicator: The percentage of incombustible materials in the incinerating waste.]

#### 7. Environmental Administration

We will establish a holistic system to enhance environmental administration and assessment.

[Achievement indicator: The enforcement status of the environmental management tools, such as the basic environmental regulations, basic environmental plan and ISO14001.]

#### 8. Environmental Education

We will raise the interest and understanding of environmental issues among citizens in and around the area. We will support their voluntary environmental conservation activities.

[Achievement indicator: Environmental education at school. The number of seminars on environmental issues at public hall, etc. The number of participants in those seminars.]

#### 9. Citizens' Participation

We will promote the participation of the residents in environmental policy

making and the local activities that are led by the residents.

[Achievement indicator: The number of resident participation in committees for environmental policy making or "partnership style" organizations.

## Case 4: Minamata City

### Environmental Model City, Minamata - Waste reduction, recycle, eco tourism, and ISO performance

Yoichi SEKI, Minamata City

#### 1. Separate collection of 23 types of waste

Minamata City introduced the separate collection of waste in 1993, before any other city in Japan. Currently, waste is divided into 23 types and collected by the station method. The collection of CFC gas has also been started. Many people responsible for administration, representatives from community creation groups visit the city every day to inspect the region so advanced in waste disposal. Recently, students from various parts of Japan also started visiting the city, during school trip as a part of their educational programs.

1. Returnable Bottles	9. Aluminum cans	17. Clothes
2. Bottles (transparent)	10. Pots & pans	18. Large waste
3. Bottles (brown)	11. PET bottles	19. Dry batteries, etc.
4. Bottles (light blue)	12. Waste plastic	20. Fluorescent lights, electric bulbs, etc.
5. Bottles (green)	13. Newspapers & leaflets	21. Landfill waste
6. Bottles (black)	14. Corrugated paper	22. Bottle caps, etc.
7. Flat glass	15. Magazines	23. Burnables
8. Steel cans	16. Other types of paper	

#### 2. Activities of Women's Liaison Meeting for Reducing Waste

Major activities of "Women's Liaison Meeting for Reducing Waste"

Concluded "Agreement on Abolition of Plastic Food Trays" with 4 large retailers in the city

Plastic food trays were prohibited in the sale of 65 items. (September 1998)  
Sales activities have been monitored on a regular basis since then.

Engaged in the distribution of free "shopping bags" to households to do away with plastic bags offered at cash registers (November to December 1998).

Supported the establishment of the Eco-Shop Certification System and engaged in examination (since April 1999).

Engaged in family ISO certification examination (since October 1999)

Prompted one of the large retailers to introduce a point-card system for

clients coming with their own shopping bags.

### 3. Operation of ISO Environmental Management System

The municipal office of Minamata City obtained ISO14001, international standard for environmental management, in February 1999. Under the system, the city intends to redouble efforts for the realization of "an environmental model city" making the most of the lessons from Minamata disease and fulfill the roles local governments should play in the preservation and revival of the global environment.

#### <Effects>

- ① A significant step for Minamata City to be recognized by everybody as an international environmental model city.
- ② Improvement of the regional image (may give favorable effects at the Local Government Environmental Council and Mansfield Environment International Conference in 2000, Mercury International Meeting in 2001, etc.)
- ③ Reduction of costs through energy and resource saving, including lower costs of electricity and paper used at the municipal office and related facilities.
- ④ Changes of ideas on environment and progress in activities of staff members.
- ⑤ Rationalization of administration and progress of reform as a result of the introduction of the system.
- ⑥ Improvement of ideas and influence on concrete activities of citizens as a result of the acquisition of environmental ISO by the municipal office.
- ⑦ Support of small enterprises in the city in the acquisition of environmental ISO.

#### <Purposes and Targets>

Reduction of waste, etc.	40	
Creation of an environmental model city		31
Promotion of energy saving	6	
Resource saving and recycling	3	

### 4. "Family ISO" (family version of ISO) – Creation of Environment-Friendly Living

<Scheme>

At home

① Declaration of activities

Choose some activities from the 35 items such as "turn off the light in an unused room" and declare them.

② Assignment works (who takes care of what) and activities

Example:

Mother - shopping-related matters

Children - management of energy and resource saving

Father - matters related to car usage

Grandmother - matters related to waste disposal

Grandfather - matters related to electricity, etc.

③ Recording of activities

Make a record to clearly show the results of the activities.

④ Reviews

Start new activities after checking the record.

Three months later:

Examination

Executed by the Women's Liaison Meeting for Reducing Waste, etc., under the leadership of the Minamata Junior Chamber.

Certification

The mayor will certify families passing the examination.

Other

The certification is valid for three years and during the three-year period, periodical examinations are held each year.

## 5. "School Version of Environmental ISO" – Creation of Environment-Friendly Schools

<Scheme>

At school

① Declaration of activities

Choose some items from 76 items including "turn off the light in the classroom whenever the light is unnecessary" and declare them.

## ② Assignment of works (who takes care of what) and activities

Example:

Principal: general administrator of environmental management

Vice-principal: person in charge of environmental management

Chief teacher: head of executive committee

Class teacher: environmental promotion staff

President of the student council: environmental leader

Vice-president of the student council: environmental sub-leader

## ③ Recording of activities

Make a record to clearly show the results of activities.

## ④ Reviews

Start new activities after checking the record.

Three months later:

Examination

Executed by the School Education Section and Environment Section of Minamata City.

Certification

The mayor will certify schools passing the examination.

Other

The certification is valid for three years and during the three-year period, periodical examinations are held each year.

## 6. Environment Meister System

"Meister" means a "master craftsman" under a German system. Meisters certified by public organizations are given a certain status.

Minamata City established a system for certifying craftsmen who attach much importance to the environment in their production activities. This is called the Environment Meister System, and commenced in fiscal 1998, before any other city in Japan. This is to improve the status and consciousness of craftsman and promote the creation of safe and sound commodities in consideration of environment and health, reflecting their experience with Minamata disease. In the first year, fiscal 1998, nine craftsmen engaged in the activities of papermaking, and the production of tea leaves, bread, tangerine oranges, vegetables, rice or eggs were certified. In fiscal 1999, five craftsmen including a tatami-maker were additionally certified, making the current total of certified environmental meisters fourteen. All of them produce products with

confidence and pay careful attention to the environment in every part of their processes, including materials selection, production, processing, selling, and disposal of waste.

"Products produced by environmental meisters" mean safe and sound products certified by the municipal office. For some time in the past, Minamata-made products were not favorably accepted on the market due to the bad image of the city. Nonetheless, people in Minamata have learned through experience the dreadfulness of environmental pollution and because of this, they can now produce truly safe and harmless products. Before the establishment of the meister system, Minamata products were simply products produced with confidence by people who were particularly concerned about the environment. In future, however, they will be traded as brand products produced by the renowned environmental meisters of Minamata City.

#### <Qualification Criteria>

- ① Have been engaged in production in consideration of environment and health for 5 years or longer.
- ② Have experience in production in consideration of environment and health, including the use of natural materials and elimination of chemicals
- ③ Have detailed knowledge, experience, technology, etc. in relation to production in consideration of environment and health.
- ④ Engaged in activities in relation to the preservation of the local environment.
- ⑤ Have detailed knowledge about environmental problems and preservation.
- ⑥ Have detailed knowledge upon pollution, including the Minamata disease.

#### 7. Promotion of Green Tourism

Minamata City is promoting green tourism, regarding the whole region as a field.

We believe that the creation of an environment rich in nature will lead to green tourism, resulting in the activation of the local economy. According to this belief, a "Minamata Green Tourism Study Meeting" was organized in April 1999, which comprised nine members, including people engaged in agriculture or forestry, and the headmen of administrative wards. These meetings



are promoting efforts for information gathering and exchange and the establishment of know-how for commercialization, in order to establish Minamata City's green tourism based upon its natural features and life style unique to Minamata.

#### Major Activities

Eco Minamata Field Tour: October 2 to 4, 1998

Held three courses to the village, mountains, and sea for 20 people from the mass media concerned with green tourism and sought their opinion and impressions.

1<sup>st</sup> Monitor Tour: May 29 to 30, 1998

Nineteen people living in urban areas participated. Three menus - "Living in the Mountain" (Kugino area), "Living by the Sea" (Fukuro area) and "Spa" (Yude area) - were offered. Evaluation criteria were clarified, including the scale, travel means, etc.

2<sup>nd</sup> Monitor Tour: September 22 to 24, 1998

Under the title of "Enjoy the Autumn Taste in Minamata", three courses - "Natural Features and Living Created by Water" (Ishitobi area), "Living in the Mountain" (Kugino area), and "Discovery of New Spas" (Yude area) - were conducted with the participation of 17 people from the mass media as monitors. A report was prepared after the courses were completed.

Prepared pamphlets and a report on Minamata's own style of green tourism.

## Case 5:Kaisei Town

### Partnership-Building for Waste reduction

Toru ENDO, Division of Life and Environment, Kaisei Town

Kaisei town is located in the western part of Kanagawa Prefecture, in the central part of the Ashigara Plain. The town stretches east and west for 1.7 km and south and north for 3.8 km, with a total area of 6.56 km<sup>2</sup>. Although it is quite small in area, the town is rich in soil and water since it is situated in an alluvial fan formed in the basin of Sakawa River, which flows north to south. It is built on flat land that slightly tilted towards the south and enjoys a mild climate.

As stated above, the town is so small and flat that we have difficulty in finding an appropriate location for constructing disposal and incineration facilities. We have been relying on neighbor towns for waste disposal and thus the issue of garbage has been rather an "Achilles' heel" for the town.

Such circumstances, on the other hand, helped to foster an increased awareness of garbage issues in the residents of the town. In particular, an NGO group in the town has been at the frontier of efforts against waste issues, leading the governmental actions relating to garbage disposal. A river cleaning crusade by all the town's residents and a resource recovery campaign, typical of which is aluminum can recovery, are actions originally tackled by the NGO group.

The town has so far reflected in its garbage control such actions initiated by groups and individuals as well as taking into account their opinions. We started separate collection of incombustibles in 1982, ahead of other neighboring towns. As a result of gradually increasing resource recovery activities since then, we have achieved and are maintaining a resource recovery rate of 20%.

We have been implementing various efforts for raising public awareness in order to reduce waste and improve the rate of resource recovery. We are also promoting resource recovery by setting incentive payments for the recovery of resources by groups. Our other efforts include campaigns for raising awareness and seminars given by town officials on waste disposal at community meetings.

In addition to the above, a panel discussion on the topic of constructing a resource recycling society was held this year with the Mayor and senior

members of NGO groups, among others, serving as panelists. We also constructed and commenced operation from this year of a test facility named the "Green Recycle Center" for composting yard waste and garbage. The facility is used to perform demonstration tests with a view not just to incinerating yard waste and garbage but to recycling them as compost. The final aim is to increase recycling rates in the future.

The waste problem cannot be solved through efforts initiated solely by governments. It is essential that the government, business operators, and residents cooperate and build a reliable relationship with each other. Based on such an understanding, we believe it is necessary for us to further develop our relationship with residents and business operators.

## Case 6:Gold Coast City

### Water Pricing and Community Consultation

#### **Gold Coast City's Water Services**

- Department responsible called Gold Coast **Water**
- Assets of \$1.2 billion
- Average Age of Assets is 20 years
- Resident Population of 390,000
- 3.3 million tourists per year

#### **Water Supply Assets**

- Two Dams & Two Water Treatment Plants
- Water demand of 60 million m<sup>3</sup> per year
- 2,700 km of Water Mains
- 185,000 properties with Water Services
- Full metering of customers water use

#### **Sewerage Assets**

- Six Sewage Treatment Plants
- 11% of Sewage Treated using Advanced Nutrient Removal of Biological and Chemical
- 89%to Secondary Standard
- 2,600 km of Sewerage Mains
- 550 Sewage Pumping Stations

#### **Gold Coast Corporate Plan**

- Community Focus
  - communication and service standards
- Environmental Sustainability
  - maintain the natural environment
- Economic Sustainability

#### **National Water Resource Policy**

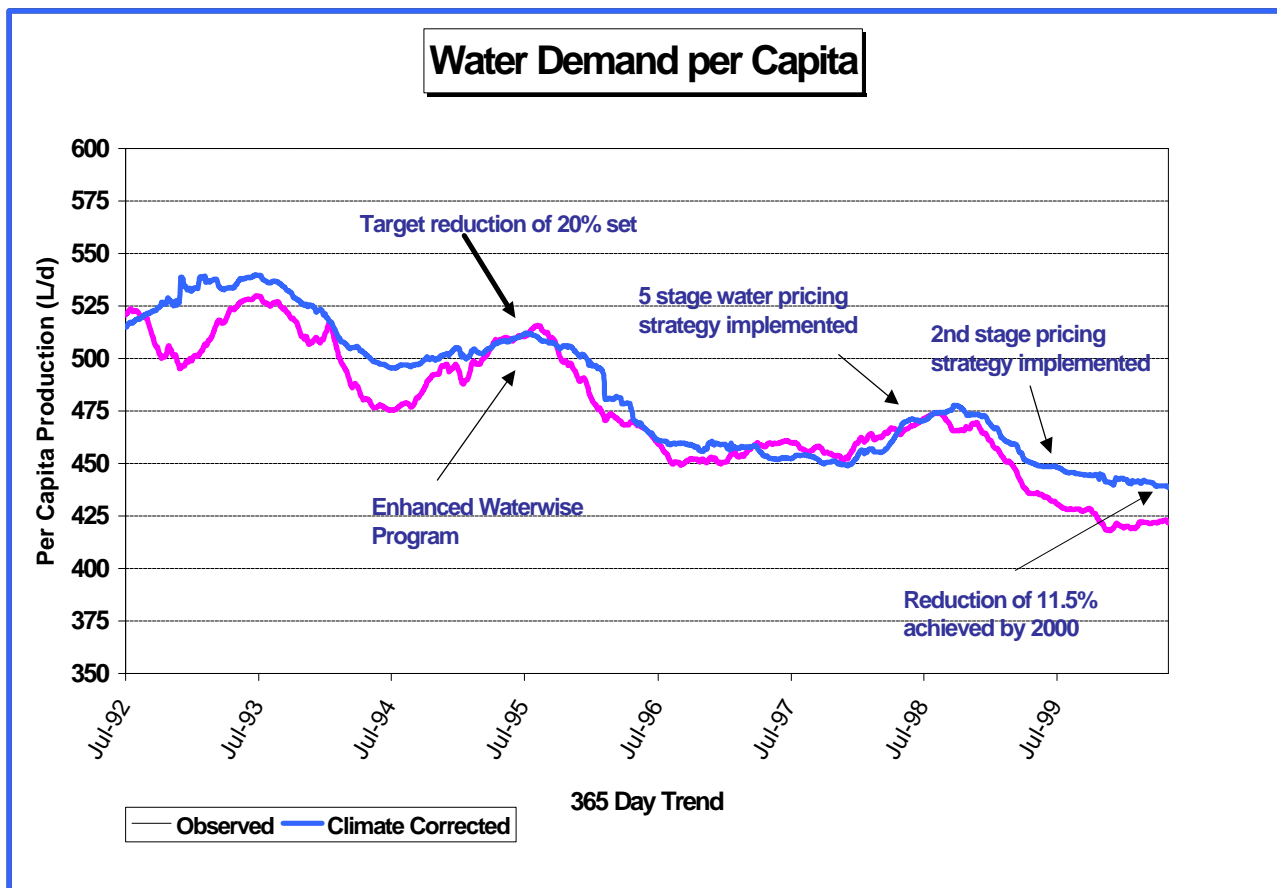
- Conform with broader national water reforms
- All water authorities to adopt a water service charge by 1998 comprising an access and usage component
- Requires full cost recovery of O&M and return on capital
- No cross-subsidies between consumers
- Assessment required of the costs and benefits of price reform on community

#### **Conservation of water resources**

- Deferral of augmentation is major benefit

- Dam augmentation was required by 2011
- Capital cost of \$75 million
- Demand management & pricing provides deferral by 10 years to 2021

## Water use on the Gold Coast



## Gold Coast Water Strategic Plan

### 2000 - 2003 targets

- 10% increase in customer satisfaction
- 3% reduction in water use per property
- 25% reduction in total nitrogen releases
- 50% reduction in phosphorus releases
- 50% increase in beneficial reuse of wastewater (currently 8%)

## Gold Coast Water Environmental Report 2000

### Capital Investment

- \$200 million investment in Northern Wastewater scheme:
  - environmentally acclaimed

- eliminate disposal of effluent to ocean
- beneficial reuse of byproducts to canelands and power generation
- 100% tertiary treatment of all wastewater by 2003

### **Pricing Strategies**

- Water Pricing Reform needed to be consistent with intent of Corporate Plan
- removal of free water use allowances
- pay for use charges introduced from July 2000 for residential
- pay for use charges to be introduced for commercials by July 2001
- incentive based pricing

### **Considerations in determining pricing policy**

- Limited regulatory intervention at present
- Majority of community wanted pay for use water charges
- Consumers have potential to reduce charges
- Water demand is price sensitive

### **Further Considerations**

- Charges are more equitable and cost reflective
- Potential shift in revenue between consumer groups
- Phased in implementation approach

### **Non fiscal demand management programs**

- Waterwise Communication & Education Strategy
  - to reduce water use by 20%
  - synergy with water pricing strategies
  - to increase environmental awareness
  - consultation with stakeholders
- Unaccounted for Water Program

### **Waterwise for Schools, Resorts and Hotels**

### **Community Consultation**

#### **Water Pricing Community Advisory Committee in 1996**

- Examine new alternatives for water pricing
- Residents, pensioners, environmentalists, businesses
- Committee recommendations to Council in 1997
- Committee report put on public display for comment
- Recommendations endorsed by Council

### **Other Community Advisory Committees**

- Northern Wastewater Effluent Reuse Advisory Committee
- Trade Waste Advisory Committee

### **Community Consultation for Pricing**

- Appointment of consultants to manage
- Free call telephone hotlines
- Discussion groups

- Interviews with Advisory Committee
- Interviews with top 25 commercial water users
- Telephone survey of consumers
- Fact sheets available on issues

**Community Consultation (post pricing changes)**

- Staffed public displays
- Brochures to all residents on pricing policy
- Residents information booklet
- Brochure on “How to read your Water Meter”
- Community group presentations
- Dedicated telephone lines for enquiries

## Case 7: Pusan Metropolitan City

Food Reduction Program Via participation of community group  
Ockying, HUR, the Institute for Policy Development, Pusan Metropolitan City

### 1. Profile of Pusan Metropolitan City

**Population:** 3,879,000

**Land Area :** 749km<sup>2</sup>

**Budget :** US\$ 3.8 billion (2000)

**Location**

Pusan lies between 128° 45' 54 "and 129° 18' 3" east longitude, 34° 23' 36" and 35° 23' 36" north latitude. Pusan is in the same latitude as Tokyo

**Climate**

Pusan is in the Temperate Zone with a mild maritime climate. The average temperature of Pusan is 14° C Pusan is cool in the summer and warm in the winter.

**Economic Activities**

Retail, trade, services, port logistics

✧ Container Handling Volume: 6,440,000 TEU(200), the 4<sup>th</sup> in the world

### 2. Project Description

#### 1) Situation before starting the project

The rapid growth in industry and population of Pusan Metropolitan City has made waste management a challenge. Most food waste had been landfilled along with other domestic solid wastes by 1994 when this project was initiated. Food waste composed 31% of the total waste production in 1994.

*Daily Production and the Management of Waste in 1994*

(Unit: ton/day)

Waste Production	Recycled	Amount Treated		
		Subtotal	Landfilled	Incinerated
4,600(100%)	985(21%)	3,615(79%)	3,546(77%) <b>Food waste:1,426(31%)</b>	69(2%)

#### 2) Initiation of the project

As expansion of landfill sites faced public opposition because of a noxious smell and leachates resulting from the decomposition of organic waste, the city government strove to seek out the way of food waste reduction. The food waste recycling project was started by the woman's association of the Guseo Sunkyoung Apartment complex in Guemjung-Gu of Pusan Metropolitan City under the guidance of Mr. Bae Myung-chang, the president of the Republic of Korea Red Cross-Pusan Chapter.

#### 3) Processes of the project at the first stage

EM ferment was provided to be added in home food waste disposal chamber. Fermented food waste was collected every week. It was transferred to farmhouses and used as an organic fertilizer.

#### 4) Goals



Zero carrying in of food waste to landfill sites and incineration plants and utilization of food waste as a resource

## 5) Objectives

- Changing eating habits
- Saving cost for constructing the waste treatment infrastructure of the city  
(Wasting food costs over US\$6,500 million annually for nation-wide)
- Reducing the 2<sup>nd</sup> environmental pollution posed by incineration and landfill leachate
- Improving citizen's health by providing them with organic agricultural products cultivated by compost of food waste
- Supporting livestock industry by improving feed quality

## 6) Community Participation

The project was started up by voluntary participation of the women's association of one apartment complex under the guidance of the president of the Republic of Korea Red Cross-Pusan Chapter.

## 7) Progress

This successful project was distributed to other communities by educational presentations. The movement was gradually expanded to the whole society of Pusan Metropolitan City.

45%(495,000 homes) of the total 1,100,000 homes are currently participated in this project.

*The number (percentage) of homes participating*

1995	1996	1997	1998	1999
150,000(13.6%)	224,000(20.4%)	292,000(26.5%)	350,000(31.8%)	500,000(45.5%)

## 3. RESULTS ACHIEVED

This project has contributed to

- 1) Changing the eating habits of the citizens
- 2) Saving food expenses by planned menu and planned purchasing of the food material.
- 3) Reducing the amount of carrying-in waste to landfill sites and incineration plants by removing the food waste.

Year	1995	1999	The amount reduced: <b>950 ton/day</b>
Amount carrying-in	2,899 ton/day	1,949 ton/day	

- 4) Improving the water quality of the leachate.

Year	1996	1997	1998	1999
Quality(ppm)	34,276	25,299	10,192	5,905

- 5) Reducing the risk of the 2<sup>nd</sup> pollution

## 4. Importance of the project

- Voluntary participation of the local community and intimate cooperation between the city government and community group
- Extending landfill site use by reducing the amount of the waste production
- Increasing incineration efficiency by removing wet organic waste
- Decreasing the 2<sup>nd</sup> pollution of underground water caused by leachate
- Preventing pollution and acidification of soil

## 5. Applicability of the project in other communities

It can be applicable and recommendable to any communities.

# The Iida City Hall's ISO-related Initiative and the Study Group on the Community-Wide Initiative for the Environment and ISO Certification

Toshiaki KOBAYASHI, Chief, ISO Campaign Section, Environmental Conservation Department, Waterworks and Environment Division, Iida City

## 1. Iida City

Iida City is located in the southern part of Nagano Prefecture, which lies north-to-south in the middle of the Japanese archipelago. This mountain city is surrounded by the "Central Alps" to the west and the "Southern Alps" to the east. In the middle of the city flows the Tenryu River, which originates in Lake Suwa and runs south into the Enshu Sea.

Iida is known as a mountain city as it boasts natural beauty as exemplified by mountains and rivers, as well as a long history fostered by its natural environment. Along both sides of the Tenryu River run terraces shaped by the upheaval of the Alps and erosion by the river, constituting the landscape peculiar to the Ina Valley.

With a climate warmer than any other part of Nagano Prefecture, the region has been inhabited since the Jomon period (10,000 BC to 300 BC). People have established their lives here, taking advantage of the blessings of nature in the region.

Agriculture is prospering in Iida despite the fact that forest land accounts for 86 percent of the total area of the city. As Iida is situated at a latitude of 35 degrees north, where the northernmost part of the pear-producing region and the southernmost part of the apple-producing region overlap each other, various kinds of fruits are grown on the upper river terraces. Over the flat and lowest terraces extend rice paddies.

Iida City is a "town of *Ringo Namiki* (rows of apple trees) and puppet shows." The history of *Ringo Namiki* dates back to a big fire in April 1947. The fire was first a small one, but after being fanned by a strong wind, it became bigger and bigger and eventually burned down 80 percent of the densely-populated area in the city. Rows of old houses and other buildings that formed a beautiful city landscape, reminiscent of an old castle town, were reduced to ashes. Only the burned ruins remained. In the course of rebuilding the city, on their own initiative, the students of a middle school planted 40 apple trees along

the central reservation of the main street, in a bid to create a Ringo Namiki. Their efforts eventually culminated in the construction of the "Town of *Ringo Namiki*." In 1999, the entire *Ringo Namiki*, 400 meters in length, was turned into a park despite many hurdles such as thefts of the trees, plans to convert the street into a parking lot, and the general aging of the trees. Now *Ringo Namiki*, as a symbol of Iida City, gives the citizens peace of mind with the trees bearing beautiful white flowers in spring and red fruit in autumn.

As the "town of puppet shows," Iida City is filled with puppet shows during the "Puppet Show Festival" in early August each year. Since the first puppetry carnival in 1979, combined efforts to promote this cultural movement by citizens, puppeteers who love Iida, and the municipal authorities, have culminated in a form of regional culture. In 1999, the annual puppetry carnival was reborn as the "Puppet Show Festival," in which citizens and puppeteers take the initiative.

This year, nearly 300 puppet troops including some from abroad participated in the annual event. They played at a total of 85 locations throughout the city, including community centers and daycare centers. Under the slogan "everyone can take part—by seeing, playing or supporting," everyone was invited to the event.

## 2. Environmental Administration

Blessed with a rich natural environment, Iida City has been pursuing a progressive environmental administration. In June 1987, the city established a citizen's charter comprising five pledges, the first of which says "we are committed to cherishing nature and pursuing an Iida City with a beautiful natural environment." In October 1992, the city set up the Eco-Friendly Lifestyle Promoting Headquarters designed to encourage energy conservation and paper recycling within the city hall. In April 1996, Iida City drew up its basic plan aimed at pursuing a Cultural Environmental city in which citizens lead sound and healthy lives and conserve the beautiful natural environment. Under this basic plan, in December 1996, the city drew up the "Iida Environmental Plan 21" designed to realize a community that cohabits with nature.

In July 1997, Iida City was designated as an "Eco-town Area" by the Ministry of International Trade and Industry (MITI). Based on the Eco-Town Plan (plan to build a eco-friendly city) and the "Tenryukyo Eco-valley Project," Iida City is pursuing a resource-recycling community with zero emissions.

In April 2000, Iida City opened part of the "Environmental Industrial Park" designed to promote recycling-related R&D businesses and environmental learning, as two such businesses were set up in the park with MITI's Eco-Town subsidies. The city is now proposing an "Eco Housing Village" (eco-friendly housing).

### 3. the Acquisition of ISO 14001 Certification

Iida City launched its efforts to win ISO 14001 certification with regard to the duties and affairs at all the facilities within the city hall with a declaration to this effort in July 1998. After a run-up period of one year, during which its own staff training without the help of external consultants was provided, the city announced its environmental policy in September 1999, commencing the operation of the environmental management system. After the appropriate examination and registration procedures, Iida City earned ISO 14001 certification in January 2000.

The acquisition of ISO 14001 certification by Iida City is significant for the following areas:

- (1) The municipal administration in general
  - (2) Local businesses, in that the acquisition sets an example to be followed by them
  - (3) City employees, in that the acquisition raised their environmental awareness
- In other words, Iida City has acquired ISO 14001 certification for three fundamental purposes.

- (1) To realize a "cultured eco-friendly city" and support the implementation of Iida Environmental Program 21, based on the steps the city's environmental administration has taken so far
- (2) To strengthen cooperative relations with local businesses through the activities of the Study Group on the Community-Wide Initiative for the Environment and ISO Certification
- (3) To further activities to reform the duties and affairs within the city hall.

In this context, Iida City is committed to continual improvement through its environmental management system.

### 4. ISO 14001 and "IEMS 21 (I-I-Mu-Su 21)"

While efforts by the city hall's headquarters culminated in the acquisition

of ISO certification, the branch agencies, including branch offices and municipal daycare centers did not make such efforts in a systematic way. Under these circumstances, the gap in environmental awareness between the employees at the headquarters and those at the branch offices has widened. To narrow this gap, Iida City launched, in June 2000, activities for environmental improvement called "IEMS 21 (I-I-Mu-Su 21)" as a simplified environmental initiative in line with the concepts of ISO 14001. These activities involve all city employees.

The IEMS 21 is designed to roll out the Iida Environmental Management System (IEMS) into the 21st century. "I-I" in "I-I-Mu-Su" also represents Iida and "Mu-Su" from "Mutosu," a catchword for local residents who are committed to foster community development on their own initiatives. The IEMS 21 initiative, involving all city employees, aims to realize a cultured and eco-friendly city. Some of the common goals are to reduce the consumption of kerosene, gas, electricity and copy paper, sort and reduce waste, and to encourage green purchasing.

Because IEMS 21 has been launched as a simplified system with a simplified PDCA (Plan-Do-Check-Act) cycle, internal auditing and certification have been left out, and how these areas should be handled remains to be decided. Anyway, the initiative is significant in that it also serves as an experiment toward realizing self-compliance without examination or registration. The elementary and middle schools in the city launched an even more simplified version called "IEMS at School," in September 2000.

## 5. Study Group on the Community-Wide Initiative for the Environment and ISO Certification

The Study Group on the Community-Wide Initiative for the Environment and ISO Certification is a voluntary body born out of the "Eco-Town Saloon" within the "Eco-Town Project." Its aim is to "create a community culture for environmental improvement—conserving the local natural environment and creating a sustainable community."

A study group was launched in November 1997 by the city hall and five local businesses, and known as the "Study Group for the Community-Wide Initiative to Acquire ISO Certification." The idea was that local businesses have an obligation to work together for a better environment as corporate citizens. Further, it was hoped that initiatives by local businesses to acquire ISO

certification would develop into a major movement involving all citizens. Once a month, the study group members visited each other's plants, inspected waste management operations, and recycled waste paper to produce copy paper.

In July 2000, the study group reviewed its organization and operations and changed its name to the present one in light of its original mission and values, as the conventional loose organization could not meet the needs of the times. For the first time, a representative has been appointed and the steering committee and the secretariat were established. The focus has been placed on the activities of five subgroups classified according to the levels of members' activities. Now the study group comprises 22 entities, of which 10 have acquired the ISO 14001 certificate and 8 are now taking steps to do so.

In addition to encouraging local businesses to acquire ISO 14001 certification, both the subgroups and the study group as a whole are developing and operating the "Iida Version of Environmental ISO," which does not follow the examination and registration procedures that involve external examiners. The study group is also looking into the standardization of paper for recycling and the circulation of "eco-money." Now the group is attracting praise and attention as its activities are led by the private sector rather than municipal authorities.

## 6. Remaining Problems for Iida City

It has become apparent that as the first municipality to acquire ISO 14001 certification, Iida City has a heavier responsibility and a bigger role to play than expected. The city needs to establish "genuine" communication among its employees through basic training in energy conservation and the sorting of waste, so that they can exchange frank opinions even in the case of internal auditing. In this process, it may be a good idea for city employees to "enjoy" pressure from citizens, local businesses, and other municipalities. Through checks and corrective action, which have been insufficient so far, efforts to reform the municipal government amid the trend toward decentralization, and to enlighten city employees should be systematically incorporated into everyday operations.

The acquisition of the ISO 14001 certificate is just a starting point, as the scope of its application is limited. Iida City needs to make extra efforts to expand the scope of its activities through "IEMS 21" and "IEMS at School," so that the environmental management system will succeed in all relevant agencies

and operations.

Environmental improvement cannot be made by one municipality alone. It is the responsibility of Iida to exercise leadership and support local businesses and neighboring municipalities in acquiring ISO certification as the trailblazer in Nagano Prefecture. It is urgently required to firmly establish the "Iida Version of Environmental ISO," primarily endorsed by the Study Group on the Community-Wide Initiative for the Environment and ISO Certification. Among the many challenges now facing this "cultured eco-friendly city" are how to secure the budget for effective investment in environmental administration, as well as the successful implementation of the Tenryukyo Eco-valley Project."

Report of Questionnaire for  
20% Club First Meeting in  
Yokohama 2000

Number of answers : 40

China:1, Uganda:2, Korea:1, Indonesia:1, Austraria:1,  
Sri Lanka:1, Japan:33

1. What kind of role do you expect to 20% club for sustainable cities ? Please check applicable answers.

- a) Information provider or information center
- b) International network of local governments
- c) Guide for local governments toward sustainable efforts
- d) Others

a	36
b	21
c	9
d	2

2. How do you evaluate the current activities of 20% Club? Are you satisfied with:

1) Newsletters

- a) Yes.
- b) No. We want to have it improved.
- c) Others( )

a	34
b	3
c	1

\*If you have any idea to improve newsletters, please specify.

- Start the new article introducing interesting items of current topics.
- My city would like to know any comment and/or suggestions regarding our implementation program we report to 20 % Club. May be it won't be necessary to issue in Newsletter but in another form.
- Require all members to send their experiences through articles. Specify the period the newsletters would come out.



- Although we are satisfied with the current contents of the news letters to some extent, we want them to have more useful information & knowledge that can be adopted to our development programs.

## 2) Case Study

a) Yes.

b) No. We want to have it improved.

c) Others( )

a	36
b	2
c	1

\*If you have any idea to improve Case Studies, please specify.

- Introduce the progressive case studies of private agencies as well as those of local governments.
- Members should send their own case studies and the secretariat to edit for publications.
- As mentioned above, we would like to have more case studies about environmental programs held in developing countries which have similar situations and problems to ours.

## 3) Homepage ( <http://www.shonan.ne.jp/~gef20/> )

a) Yes.

b) No. We want to have it improved.

c) Others( )

a	27
b	5
c	2

c: I can't comment on this as I has not visited this page on the web yet.

\*If you have any idea to improve homepage, please specify.

- Link to web-sites of all member cities
- More pictures
- We feel little bit difficult when we would open your homepage due to the Japan written. It would be better if it is modified with English written.
- Member to have space each on the home page for the club. The space shall give members personal information.

3. Please comment or describe your idea of how the 20% club will continue its activities from the year 2002, 5 years after its establishment in 1997. (Please call in mind the Article 2 of our bylaws, which mentioned our numerical targets shall be aimed to be achieved in approximately 5 years.)

- 20%club members should review the targets. Try to accomplish ones that has not been achieved, and set new targets.
- We understand the importance of progressing partnership of local governments, however, we hope 20%Club review and reorganize its role as the information provider, which should be one of its main activities.
- We suggest that 20%Club disclose the numeral targets set by members as well as the state of achievement, and award the prize to the members who have achieved them.  
Integrate the numeral target items so as to make it possible to evaluate and compare them under the same condition.
- We suggest that 20%Club plan to celebrate its 5th anniversary by organizing symposium or forum, issuing the anniversary issue, and so on.
- As for the numeral targets, what we are actually doing is to keep reviewing them according to the performance.
- We admit some meaning of assessing the performance of the first 5 year after the establishment, however, the period of evaluation is not necessarily to be 5 years
- Most local governments' income policies are seriously at risk. It seems that they will be involved in the activities as far as their budgets allow.
- Consider the meaning of continuing of the 20% Club, taking into account the members' opinions at the 5th anniversary of establishment.
- We should consider strategies that reflect the 20% Club activities on Lio +10.
- We hope that the 20% Club continues setting new numeral targets every several years.
- At the moment we Ninomiya-cho Town are making efforts to develop the Environmental Basic Plan. We expect the 20% Club continuously provide us various information.
- Involve more cities in the club, including more developing countries. Mobilize funds from different potential donors. Hold some training programs for the cities of developing countries in the field of sustainable development.
- The 20 % Club members should continue to set new targets after and try to accomplish the ones which had not been achieved in the period 1997-2002. Members should continue to report on the sustainability of early success and on progress of new projects. Another period of 5 years after 2002 may be needed for the members to be able to say they have achieved their targets.
- The 20% Club should introduce the inspiring case studies with the same efforts toward the numeral targets.
- For the second-5 year, we would like the 20 % Club not add the number of member but we would like the 20 % Club to maintain the relationship with the members through improving the quality of the cooperation program. For example, the 20 % Club not only to

provide information but also to bridge our city with the institution in Japan who has programs to improve human resource quality, such as JICA etc. We also feel difficult when we know that whatever program ( seminars or workshops) you organize we couldn't participate in it because we should anticipate for all budgets. That such situation is as your consideration due to different conditions of each city.

- The Club should endeavour to guide its member through setting of targets and monitoring performance. Cause seminars and conference to enable sharing of information.
- We hope that the 20% club will establish close relationships with many developing countries which are facing serious environmental problems like us. Then we can share essential and useful information together so that we can make our societies more eco-friendly and more sustainable in the near future.

#### 4. What do you think about collection of membership dues?

According to our bylaws, there shall be, at present, no compulsory membership dues. The expenses of secretariat have been covered by Kanagawa Prefecture.

- a) There should be some membership dues.
- b) There should not be any membership dues.
- c) Others.

If you checked a) or b), please describe the reason. If you check c), please specified your thought.

a	6
b	31
c	1

a)

- There may be difficult to continue activities on the finance only from Kanagawa Prefecture.
- This creates a sense of ownership and belonging.
- This creates sense of responsibility. This fund should finance operations of the secretariat, create seed funds to persuade donors to contribute to the noble cause of the club.

b)

Most of the reasons for b) were financial difficulties of member cities.

- We cannot get additional allocation of budget.
- Because of financial difficulties
- Members will be decreased by introducing membership dues.
- Before considering about membership dues, we should examine reducing costs. For example, the distribution of newsletter by e-mail.
- There was explanation that the bylaws would not revised when the club was established.
- This issue should be considered after that the management of the club encounter obstacles.
- This issue should be considered with activities of 20% Club. It is difficult to defray dues in

the situation of we can not find out clear significance and targets.

- It is not easy to collect membership dues, which is proved by many practices of other organizations. Only the membership dues themselves could not support the operation of the secretariat.
- Although collecting of membership dues is desirable to Kanagawa prefecture, it should not be compulsory, considering the budget deficit which is so common in developing countries.

c)

- Now, it won't be necessary to collect of membership dues, but for the second-5 year,
- If there would be progress of the program quality like we mentioned in the question number 3 above, we don't mind to collect it.

If you check a), the price of membership due should be:

a) fixed US\$\_\_\_\_\_per year

b) fluctuated by size of population or by fiscal scale

c) Others ( )

fixed: US\$45

fixed:US\$90

fixed: US\$ 10

fluctuated by size of population or by fiscal scale

fluctuated by size of population or by fiscal scale

fixed US\$180

And do you think your government can afford it?

( ) possible.

( ) impossible

6 members who answer a) + 2 members of b) c)

possible 6

impossible 2

5. Which area do you expect the 20% Club to gather and provide the information of? (Check all applicable boxes.)

a) ISO14001	10
b) Environmental accounting, Environmental report	17
c) Green purchasing	18
d) Indicators to evaluate sustainability	17
e) Environmental education	23
f) Partnership with citizens	20
g) Economic instruments of environmental policy ( ex. taxation, subsidiary)	11

h) International cooperation	14
i) Natural Energy	8
j) Nature conservation/Greening	10
k) Solid Waste management	8
l) Wastewater management/ water resource management	21
m) Air pollution control	6
n) Transportation management	5
o) Others	0

# UNU PROJECT DOCUMENT<sup>1</sup>

## A. Project Summary

### 1. Project Title

Environmental Management at the Local Level in Japan  
*The City Inspirations Initiative*

### 2. Expected Project Duration

Two years

### 3. Proposed Starting and Ending Dates

April 2000 – March 2002

### 4. Project Abstract

The Project aims to document processes and initiatives in environmental management at the local level in Japan. It takes a project, programme, plan, or policy at the local level – at various stages of development from planning to implementation to evaluation – and documents its ingredients of success (or failure) for replication and transfer to developing cities in the Asia Pacific Region.

Each of these documented cases will be termed a 'City inspiration'<sup>2</sup> These are very basic in their content in order to keep their understanding and adaptability easy. A city or urban area can be a source for several City Inspirations – initiated and partnered with local stakeholders, and implemented at different levels of governance.

Individual wards and cities in Japan, as well as networks, NGOs/NPOs, and citizens groups will be contacted to collate information. Similarly, networks of mayors, city networks and other international organizations and individual city mayors will be contacted to disseminate collections of city inspirations.

The Project will have the following components:

#### *1. Information Collation:*

The Project will directly contact city government officials and their environment departments, NGOs/NPOs active in the city (including citizens groups etc.) in order to identify City Inspirations. Besides the above, networks of cities and relevant national ministries in Tokyo will also be contacted.

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<sup>1</sup> Version 1.5 dated 20 October 2000

<sup>2</sup> See Appendix for a list of frequently asked questions (FAQ) on City Inspirations.

2. *Capacity building of local government networks in the Asia-Pacific region:*

The Project will disseminate research results directly to city governments. Besides this, networks of city governments in the Asia Pacific region will also be targeted. Ongoing activities of these networks and associations will be used to familiarize city officials of the City Inspirations Initiative.

3. *Information dissemination:*

The success of the City Inspirations Initiative will depend on its usability. City governments in developing countries will be the target users of the collection of inspirations. The format of presentation is deliberately kept simple, a single sheet of paper, in order to ensure that it is easily understood and adapted with minimal local modifications by a wide variety of local stakeholders in developing cities.

A folder will be prepared, containing loose sheets of City Inspirations that can be built upon as the collection grows. Interaction with local institutions and organizations, researchers and academics, experts and consultants, government ministries and agencies, and UN and International organizations, will be explored where relevant.

A comprehensive website [ <http://www.unu.edu/env/c-insp/> ] — to be made available online in early 2001 — will be prepared to complement the folder of City Inspirations. Seminars and conferences that brings together city governments in Japan and in Asia-Pacific region will also be targeted for wider dissemination, as well training institutes, universities etc. An online mailing list will be constituted for announcing new and updated information on the City Inspirations Initiative.

## B. Project Justification and Objectives

### 5. Background and Justification

Environmental management is a global phenomenon, embracing all stakeholders in all countries, whether or not there already exists an organized response to managing environmental impacts.

Today, there are gross inequalities between the world's high-income and low-income nations in terms of income distribution, consumption patterns, access to resources and environmental impact. Yet both groups are committed, at least in words, to achieving a better managed environment.

Particularly in Japan, public awareness of environmental issues has been rising in recent years and further degradation of the environment has been subject to more stringent regulatory regimes, voluntary agreements and growing consumer and stakeholder pressure on local governments, business and industry and other local stakeholders.

Underlying internal and external changes that Japan is undergoing in the social, economic and ecological fronts has been a key common denominator - the local and global environment. A number of issues have been brought under the umbrella of a sustainable environment, seeking justifications, priorities and solutions that aim at an environmental and ecological balance. This has touched almost every sphere, particularly in bringing the role of local governments to the fore, influencing purchase decisions of ordinary consumers, and in turn affecting product design, manufacturing processes, retail systems etc. Prioritizing the environment in all spheres of life in Japan has been a result of both learning from the mistakes of the past, as well as from looking to the future.

It is with this background that the City Inspirations Initiative is being proposed, to document and disseminate best practices in environmental management at the local level in Japan. This will enable cities and local governments in the developing countries of the Asia-Pacific region to gain from the experience – not only in finding innovative local solutions, but also in avoiding the repetition of the same mistakes.

The complexity of local environmental management in Japanese cities has clearly raised the need for a better understanding of the different strengths, potentials and roles of local stakeholders. It has also emphasized the importance of local governments in these processes. Concepts such as local autonomy, information disclosure, informed choice, decision-making models etc. have been increasingly used in local planning and development. Using lessons learnt from the Japanese experience, developing cities in the Asia-Pacific region need to place greater emphasis on the role of local governments in environmental management, and simultaneously call for wider and deeper participation and partnerships with all local stakeholders.

## 6. Objectives

The objectives of this project are:

- **INTERACTION:**  
*To understand the networking and partnership processes between local governments and other urban stakeholders, and to highlight the critical (direct and facilitative) role of local governments in these processes.*
- **KNOWLEDGE TRANSFER:**  
*To document (in an easily understandable and adaptable format) local environmental management initiatives at the local level in Japan in order to transfer them to developing cities.*
- **CAPACITY-BUILDING:**  
*To provide a menu of options in environmental management practices for developing cities of the Asia-Pacific region.*



## C. Methodology and Expected Outcome

### 7. Methodology

#### 1. Information Collation

Information will be collated via a variety of means – direct contact with local government officials in Japan, and also brochures, pamphlets, reports and other secondary material from a variety of sources. Since much of these information sources will be in Japanese, this will have to be translated to English.

#### 2. Information Packaging

The collected information will be studied and analyzed in order to extract 'City Inspirations' that can be summarized and condensed<sup>3</sup> A City Inspiration will cover the following aspects: the initiator of the inspiration; essential elements and aims of the inspiration; partners sought and the processes of partnership; processes of implementation; unique features and ingredients of success/failure; lessons learnt; contact persons/institutions for further information.

In order to enhance the replicability and ensure ease of understanding and replication, each inspiration will be presented using only a single sheet of paper, with contact addresses for additional information. Photos and graphical means of presenting information will be used to enhance understanding of the inspiration being presented. The online version will contain additional links to Internet sites for more information.

#### 3. Information Dissemination

The collection of inspirations, will be presented in a loose-leaf folder, and will also be made available via a website. While the print version will contain contact addresses for further information, the online version will provide links to relevant additional information.

City governments, and organizations/networks that bring together city governments will be targeted for dissemination.

### 8. Expected Output/Results

The following are expected to be the outcome of this project.:

1. *The City Inspirations Folder* – will be a loose-leaf folder containing the actual single sheet inspirations, from 100 to 200 inspirations per folder. This folder can grow, after it is first issued.

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<sup>3</sup> The objective of an 'Inspiration' is simply to inspire. It does not provide detailed technical or policy guidelines, but only a menu of different ways of tackling environmental problems. By outlining the various tools used, stakeholders partnered, and projects implemented, an Inspiration enhances its transferability.

2. *Working Paper Series* – will cover summarized overviews of inspirations, background information and other theoretical issues to complement the inspirations folder. Other formal publications, such as books and manuals, will also be explored.
3. *Online Database* – will contain inspirations that can be accessed via a web browser and will contain links to additional information that can also be searched.
4. *Presentations and displays* – will be done in symposia and workshops throughout the region and in Japan.
5. *Networking* – will be facilitated linking institutions and organizations that have participated in identifying and documenting City Inspirations for further interaction.

## D. Project Management and Implementation

### 9. Project Coordination

#### *UNU Implementing Team:*

Dr. Hari Srinivas, Programme Associate

#### *Advisory Team:*

Prof. Motoyuki Suzuki, UNU

Dr. Libor Jansky, UNU

Dr. Jerry Velasquez, UNU/GEIC

Ms. Makiko Yashiro, UNU/GEIC

## Frequently Asked Questions (FAQ) on City Inspirations.

### Contents

- What are City Inspirations?
- Why are City Inspirations important?
- How can we learn from City Inspirations?
- What qualifies as a City Inspirations?
- What are the possible issues to be covered by the City Inspirations?
- How to nominate and submit examples of City Inspirations?
- What will be the output of the City Inspirations Initiative?

### WHAT ARE CITY INSPIRATIONS?

City Inspirations are examples of actions that could be recommended for further application, whether in a similar or adapted form. They are actions, initiatives or projects which have resulted in clear improvements in the quality of life and the living environments of people in a sustainable way, as well as broad urban environmental management.

It would therefore include new services, organizational/operational structures, laws, constitutions, procedures, partnerships, ways to relate to and solve problems etc. It would also enable a continuous process of measuring, analyzing and comparing an organization/programme/project's products, services and practices for development and refinement. It includes the successful components of a policy, programme or project which may have been, on the whole, a failure. By taking such a desegregated view of environmental management, it is possible to generate several 'inspirations' per scheme, allowing for a broader mix-and-match in developing programmes and projects.

### WHY ARE CITY INSPIRATIONS IMPORTANT?

Through the years, similarities and differences in initiation, development, success/failure etc. of environmental programmes and projects has become increasingly apparent. Lessons have been learnt and recorded in documents and other media, including the internet. Despite these efforts, our knowledge at the global level of actions which offer vital insights is incomplete and out of date.

The project will provide a unique opportunity to set up a neutral, balanced and broadly representative process for identifying City Inspirations in the field of environmental management at the local level. A standardized approach for selecting and describing each case will facilitate comparisons between communities, and provinces within each city, as well as regionally and globally.

City Inspirations will play an important role in building a picture of environmental management and in identifying ways in which common needs and problems can be met through the application of documented successful solutions and approaches. They represent the latest and pragmatic solutions to common problems facing many local programmes and communities. They are a learning process and constitute a knowledge base for effective action now and in the future.

### HOW CAN WE LEARN FROM CITY INSPIRATIONS?

Many of the environmental problems facing cities are common to all countries: *poverty and lack of appropriate skills, air/water/noise pollution, insufficient and inappropriate use of resources* etc. Many of the solutions which have proven successful are based on similar strategies: *improving the efficiency of management and decision support systems, forging new partnerships between public, and private sectors as well as the civil societies, broadening the decision-making process to harness and focus resources and*

*energies of all key actors and communities, creating increased awareness of problems and opportunities for action.*

An effective means of know-how and information exchange is through the sharing of first-hand experience and learning from each other's successes and failures.

## **WHAT QUALIFIES AS A CITY INSPIRATION?**

There are no limits set on the size and nature of a city inspiration, nor are there any limitations on the range of organizations or groups responsible for it. These can be NGOs, user groups, neighbourhood/ward committees, private sector, the media, municipalities, provincial/state governments, regional authorities or central government ministries and departments.

Regardless of the location or scale of activity, what should be important is that the activities contribute - directly or indirectly - to improving the living environments of people in a sustainable manner, and overcoming environmental problems by providing adequate opportunity and resources. Generically, this could include skills, processes, solutions, and resources.

Particular emphasis can be paid to City Inspirations that have been developed without outside help and which can therefore provide important examples of independent and self-reliant initiatives.

Gender-sensitive initiatives also need to be highlighted - those Practices that take into account gender specific roles, responsibilities and access to resources, ensuring that the needs of both men and women are met.

## **WHAT ARE THE POSSIBLE ISSUES TO BE COVERED BY CITY INSPIRATIONS?**

Tentatively, the following aspects are intended to be covered, but will be expanded later:

- Energy conservation
- Sustainable transportation
- Waste management
- Public and community health and safety
- Air/water/noise pollution abatement
- Eco-tourism
- Urban information management
- Environmental decision-making
- Involvement and roles of the community and civil society
- Education and awareness building
- Partnership with the business sector
- Environmental policies, programmes, projects, and plans
- Environmental law, rules and regulations
- Environmental governance
- Urban design and technology

## **HOW WILL EXAMPLES OF CITY INSPIRATIONS BE IDENTIFIED?**

### *Step 1: Identification of a city inspiration*

A city inspiration is an action or initiative that has resulted in a clear impact on one of the proposed issues and involving at least two of the following key actors:

- National governments

- Local governments and their associations
- Community-based groups
- NGOs and PVOs
- Academic and scientific institutions
- Mayors, councilors
- Media groups (press, TV, radio)
- Private sector (for profit and non-profit)

The distinction between an example of City Inspirations and a good practice should be based on the criteria of sustainable impact of the initiative/action on one or more of the following:

- Legislation and regulatory frameworks providing formal recognition of the issues and problems of environmental management which have been addressed
- Policies and/or sectoral strategies at the sub-national level that have a potential for replication elsewhere
- Institutional frameworks and decision-making processes which assign clear roles and responsibilities to different levels and groups of actors, such as, central and local government, private sector, NGOs and CBOs
- Management systems that make more efficient use of human, technical and financial resources

*Step 2: Development procedure and format*

In order to keep the identification and selection process simple, each City inspiration will be developed in a prescribed form with a 600-1000 words description of the inspiration itself. This will ensure that each inspiration can be presented on a single sheet of paper. Additional material such as charts, graphics, photos etc. are to be included as an annexure or a set of links in the online version, in order to substantiate the inspiration.