

3.2. Urban Environmental Management Project

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Urban Environmental Management Project

1. Background (Research Needs)

1.1 The need for environmental research focusing on urban and local issues

It would be no exaggeration to say that Asia is becoming the key region in need of global environmental protection in the twenty-first century. The region will be increasingly vulnerable to environmental degradation and ecological disasters, facing population growth, industrial production expansion and rapid urbanization. The growing urban population and consumption levels in energy and other resources in cities, in particular, impose greater burdens on the global environment. In this regard, it is imperative to establish a comprehensive environmental management policy at the local level and to prepare appropriate measures for responding to specific local needs and conditions.

1.2 Diversity in urban environmental problems

Asian countries are highly diverse in terms of the natural environment, economy, society and culture, and the innumerable cities in these countries present even more diverse characteristics. Considering the wide range of urban environmental problems involved, it is easy to understand the tremendous diversity and span of issues that must be tackled in urban environmental management. The dynamic process of economic development and the emergence of environmental problems, however, reveal many similarities between cities. The critical matter is how to handle these similar but unique situations in urban environmental management.

1.3 The need for enhancing environmental management capabilities at local level

The rapid transformation that took place within a very short period of time, especially after World War II, is a key characteristic of Asia. Insufficient investment for urban infrastructure has led to a weak foundation for development in various regions in Asia, in spite of the seeming prosperity in cities. It is in cities that a variety of problems are becoming visible, including air and water pollution, the increasing volume of improperly treated hazardous wastes, and damage to ecological systems. An appropriate response to these problems requires analysis of the present situation, formulation and implementation of remedial measures, development and transfer of technology, and enhancement of human capacity. As many of the problems exist on the local level, their solution is generally left to the local authorities.

1.4 The need for enhancing information exchange and preparation of policy guidelines

Although national and local environmental authorities wish to learn from the good models of sustainable development of cities in other countries, there has been little progress due to limited exchange of well-analyzed information. What is needed is the relevant analysis of experiences, successes and failures in urban environmental management practices in different cities, providing a systematically-arranged policy menu which is truly useful for national and local authorities to develop their policies, plans and programs. In order to provide relevant information to policy makers and project managers of different levels of government and aid agencies, information gained from the studies should be properly analyzed, and should provide examples of policy alternatives or demonstrate policy guidelines for effective measures that can be generally applicable.

1.5 The need for facilitating inter-city cooperation beyond national borders

Recently many cities in Japan have launched environmental cooperation initiatives with cities in other countries, some of which have been remarkably successful. Nevertheless, these initiatives often encounter a number of difficulties, including financial limitations and the lack of proper coordination with the programs of national governments and international organizations. This situation highlights the importance of establishing closer connections between inter-city cooperation projects and environmental aid programs.

In this context, the "Kitakyushu Initiative" was adopted at the Fourth Ministerial Conference on Environment and Development in Asia and the Pacific (MCED4) of the UN Economic and Social Commission for Asia and the Pacific (ESCAP) held in Kitakyushu in September 2000. The Initiative is designed to assist the formation of an international cooperation network of cities to promote urban environmental management. It will be implemented by ESCAP in cooperation with its participating countries. Support of donor countries and international aid agencies, however, is a key to its success. The IGES Kitakyushu Office is expected to play a leading role in implementation in cooperation with the Ministry of the Environment (MOEJ) of Japan and the City of Kitakyushu. The Urban Management Project will play a role by providing technical advice and assistance for the implementation of this Initiative.

2. Objectives

The main objective of this IGES project is to develop useful ideas and models that serve as guidelines of urban environmental management policy in the Asian region, where local initiatives are increasingly important to achieve sustainable development in this new century.

The research themes of Phase I of the project were: (1) comparative analysis of the experiences, the current situation, and mechanisms of urbanization and environmental changes in Asian cities, (2) urban environmental infrastructures and financing mechanisms for their improvement, (3) Japan's experience in urban environmental management and its applicability, and (4) urban environmental governance. In addition, case studies were conducted on some specific topics such as urban transportation, urban water resources and solid waste management. The project focused mainly on some rapidly industrializing Asian cities (Dalian, Shenzhen, Yangtze Delta in China and Ulsan in South Korea), and compared these cities to Japan's industrial cities (Kitakyushu and Ube). Following a closer examination on the current situation and historical changes of urban development and environmental issues, it tried to identify the successes and failures on environmental management in these cities.

Thus Phase I research aimed at gaining an understanding of the current situation. In order to provide more relevant policy guidance to various audiences, however, it is essential not only to understand the actual situation of various cities but also to identify and analyze the mechanisms of how problems arise and effective measures to counter them. To achieve this end, while utilizing the information and experiences accumulated through studies in the previous phase, Phase II research will place a high priority on the following three themes:

Theme 1: Study on the Process Dynamics of Urban Environmental Evolution,

Theme 2. Urban policy integration of energy related environmental issues in selected Asian mega-cities,

Theme 3: Support for the implementation of the Kitakyushu Initiative Network.

More specifically, Theme 1. examines the process dynamics of urban environmental transformation. In Phase I, a conceptual model of urban environmental evolution in East Asian cities has been developed taking into account both changing severity of particular urban environmental issues as well as the structural transformation of major issues in relation to economic development. Based on this conceptual model, in Phase II, it will further develop and verify the model using statistical data, identify the mechanism behind these transformations process, and try to show the application of the study to urban environmental management policy in specific cities. In search of the mechanism of the process, it will first identify major factors in the transformation and the way they are acting- those that causing the drastic changes in the state of the environment in cities in different regions in Asia placed under diversified economic, social and natural conditions, such as the shift of national development policies, technological development, changing social values, etc. Then it will compare the dynamic process of transformation, drawing lessons from the past and illustrate alternative paths of urban development that may achieve the improvement of social welfare with fewer burdens on the environment. For this goal, best utilizing the information collected in Phase I study, it will conduct additional case studies of several selected cities which exhibit unique characteristics of development. The establishment of a good data base on Asian cities is a prerequisite to this study, and the efforts of data accumulation started in Phase I will be continued. The result of this study will provide better opportunities for promoting policy response, the dissemination of improved scientific knowledge and

information, the development of technology, and public participation. The study will further explore the changes associated with economic development- social change, promoting policy response, the dissemination of improved scientific knowledge and information, the development of technology, and public participation- and their implications to urban environmental contents and features. These changes, on the one hand, are causing various environmental problems, while on the other hand, brings new opportunities for solving these problems.

Theme 2. will focus on the mega-cities in Asia including Tokyo, Seoul, Beijing and Shanghai, which are emerging as centers for economic growth and consumption of energy and resources. It will analyze the energy consumption of various urban sectors in order to provide policy directions for integrating energy related policies that enhance the effectiveness of local policies.

Theme 3. is designed to assist the Kitakyushu Initiative Network that was agreed in September 2000 at the Fourth ESCAP Environmental Ministers' Meeting held in Kitakyushu. The Initiative will be implemented by ESCAP in cooperation with its members. Ministry of the Environment of Japan and the City of Kitakyushu are expected to provide special support to its implementation, and the IGES Kitakyushu Office will be in charge of organizing meetings and establishing the infrastructures of information exchange. This research project on Urban Environmental Management will provide technical assistance to the work carried out by the Kitakyushu Office. The project, in particular, will analyze the urban information accumulated through its own studies as well as through the Network and make the information available to Network members.

3. Target Groups

The target audiences of this research project are diverse and are involved in the implementation of local environmental actions:

3.1 Local government

- Officials working on environment management at municipal governments, residents, businesses, etc.

3.2 Central government

- Officials in charge of urban environmental policies

3.3 International fora, multilateral organizations, and overseas development agencies

- E.g., ECO ASIA, ESCAP, China Council, World Bank, Asian Development Bank, JICA, JABIC, etc.

3.4 Researchers specializing in urban environment

- A number of researchers and students studying urban environmental management issues

3.5 Others

- Citizens, businesses, NGOs, etc.

4. Expected Policy Results

4.1 Study on the Process Dynamics of Urban Environmental Evolution

Identification of major transformation processes in Asian cities placed under diverse economic, social and natural conditions will enable urban environmental policy makers to understand their exact situations, foresee and prepare for the problems that they may have to encounter in the future and adopt relevant policies to avoid the occurrence of these problems. This study is also drawing the attention of academic research groups, and the output of this research may make academic contributions in this research field.

4.2 Urban policy integration of energy related environmental issues in selected Asian mega-cities

The project managers will be able to evaluate the effectiveness of various measures in quantitative terms when formulating regional action plans for global warming prevention. The effects of environment-friendly lifestyles and transportation modes can be demonstrated to the general public quantitatively. Long-term policy suggestions will be provided on the shift of urban transportation systems and citizens' lifestyles toward less energy dependent ones.

4.3 Support for the implementation of Kitakyushu Initiative Network

Information will be disseminated through the network, to promote strengthened interaction between researchers and policy managers in various nations. The systematic collection, organization and verification of information related to successful urban environment management efforts (best practices) will provide guidelines for effective urban environmental management. Examples of the best practices include various policy methods (regulation, economic methods, voluntary approaches, etc.), technical measures, and cooperation and networking between various bodies. By being able to share experiences in urban environmental management, individual cities will be able to optimize their urban environmental management approaches.

5. Methodology and Schedule

5.1 Study on the Process Dynamics of Urban Environmental Evolution

a. Study items

- Methodological development in data model construction and verification
- To identify the major driving forces and governing factors of the transformation in cities and to analyze their impact on urban environment
- To establish urban indicators and compendium of urban environmental data to enable the evaluation of the state of environment and policy achievement in cities in Asia
- To draw lessons from the past experiences for the actual policy implementation
- To conduct a comparative study on regional economic development policies and their environmental impacts

b. Methodologies

- Case studies of selected cities that are subject to unique but different types of transformation processes in terms of political and social regimes, industrial structures, local environmental conditions and constraints, development policies, dominant social attitudes, technology, and environmental information, etc. The number of case study cities will be limited, as data collected by Phase I research can be utilized.
- Comparative analysis of the cities will be made for different types of cities placed under different conditions:
 - ❑ Cities in highly industrialized countries, such as Japan, which will undergo the transformation such as shift to the post-industrial society and de-materialization.
 - ❑ Cities in the top group of the rapidly industrializing countries such as Korea, Singapore and Malaysia, which will undergo a similar process of transformation that cities in highly industrialized countries have experienced.
 - ❑ Cities in the rapidly industrializing countries such as China, where there are increasing differences between rich and poor cities.
 - ❑ Cities in least developed countries, where poverty is one of the major causes of increasing urban population and environmental degradation.

c. Schedule

- Year 2001: A workshop will be organized to discuss and identify the major transformations in Asian cities and decide the detailed research framework. Case studies will be conducted on several selected cities which national governments will put greater emphasis on for their development policies, e.g., cities in the Western Part of China. A framework of urban indicators and compendium of urban environmental data will be discussed and the data collection exercise will be started.
- Year 2002: There will be the comparative analysis of cities, the establishment of urban indicators,

and the continuation of data collection.

- Year 2003: There will be the continuation of comparative analysis, the preparation of a report including policy guidelines and the publication of a compendium of urban environmental data in Asia.

5.2 Urban policy integration of energy related environmental issues in selected Asian mega-cities

a. Study items

- To quantify the energy demand and supply and greenhouse gas emissions in selected Asian mega-cities (e.g., Tokyo, Seoul, Beijing, Shanghai, Manila, Bangkok, Jakarta, Delhi, Calcutta)
- To identify major drivers affecting the energy demand in mega-cities in the process of dynamic structural changes
 - ❑ economic growth and economic structure changes
 - ❑ demographic change (natural and social)
 - ❑ changes in technology and lifestyle
- To forecast the future trends of energy demand in major urban sectors and to develop policy scenarios to achieve urban economic development with smaller increases of energy consumption and greenhouse gas emissions
 - ❑ To develop Top-down Model (Macro Economic Model)
 - ❑ To develop Bottom-up Model (Engineering Model)
 - ❑ To conduct Material Flow Analysis (for embodied energy)
- To assess the various environmental impacts caused by intensive energy and material use of both inside and outside of a city

b. Methodologies

- Form an international research team in cooperation with the research project to be launched by the sponsorship of the Asia-Pacific Network for Global Change Research (APN)
- Cooperate with IGES Climate Change Project in data sharing and methodology development
- Comprehensive analysis of the data from different cities will be conducted by IGES in-house researchers
- Collect economic and energy data from national and municipal statistics
- Collect complementary data from various research reports
- Conduct field studies as necessary (e.g., lifestyle changes, diffusion of electric home appliances, etc.)
- Develop a model to analyze the relationship between the activity levels of major urban sectors and energy demand and greenhouse gas emissions

c. Schedule

- Year 2001: Feasibility studies of selected cities (Tokyo, Seoul and Beijing), workshops co-sponsored by IGES and the APN, establishment of data collection and analysis framework, and

formation of international research team.

- Year 2002: Collection of detailed information and analysis, model development, and workshops.
- Year 2003: Continuation of data analysis and preparation of a report including policy guidelines.
- The result of the study will be submitted to the meetings of ECOASIA, through the report of IGES Project on the Long-Term Perspectives

5.3 Support for the implementation of Kitakyushu Initiative

a. Study items

- To assist the IGES Kitakyushu Office in implementing the Kitakyushu Initiative Network
- To analyze the information collected by the Kitakyushu Initiative Network and to identify best practices in urban environmental management in terms of enforcement of innovative policies, introduction of effective and efficient technologies, cooperation of different stakeholders, public participation, etc.
- To present technical papers at the meetings organized by the IGES Kitakyushu Office in order to make suggestions on the information to be collected, monitoring of the implementation, evaluation of achievements, etc.
- To disseminate the analyzed information through the website of the Kitakyushu Initiative Network

b. Methodologies

- IGES Kitakyushu Office will organize a series of meetings of experts from a number of cities, national governments and international organizations. Information from the participating cities will be collected through the Network. The Urban Environmental Management Research Unit will analyze the collected information and present technical reports at the meetings.
- More specifically, the Urban Environmental Management Research Unit will be in charge of systematic analysis of the collected data, identifying the best practices in various fields of urban environmental management and disseminating the analyzed information through the website of the Kitakyushu Initiative Network.
- The Urban Environmental Management Research Unit will also conduct complementary case studies in order to solve urban environmental problems and to collect information on the best practices via networking with various actors. (e.g., central government, local government, business, citizens, NGOs, and media). This will include citizens' initiatives and private initiatives for improving urban environmental infrastructures and their finance mechanisms.

c. Schedule

- Year 2001: IGES Kitakyushu Office will assist in organizing a series of meetings of the Kitakyushu Initiative Network. The presentation of technical papers will be followed at the meetings in order to provide technical guidance about how to implement the Initiative. For this objective, workshops will be held to discuss what are best practices, how to identify and evaluate them, what information should be collected and how to disseminate it.

- Year 2002: Analysis of the information collected by the Network and compilation of the best practices.
- Year 2003: Preparation of a comprehensive report on the cases of best practices.
- The progress of the study will be periodically submitted to the meetings of ESCAP and ECOASIA to receive their comments and advice. The Kitakyushu Initiative Network itself was endorsed by the ESCAP Ministerial Meeting as a permanent forum to promote inter-city environmental cooperation.

6. Urban Environment Project Team

6.1 Urban Environmental Management Research Unit

- In-house
 - ◆ Project leader: 1 person
 - ◆ IGES Urban Environmental Research Unit: 5 persons
 - Study on the dynamic transformation process: 2 persons
 - Study on the control of energy demand in mega-cities: 1.5 persons
 - Support for Kitakyushu Initiative Network: 1.5 persons ^(*)
- Outside
 - ◆ Universities and research institutes (Korea, China, Malaysia, Thailand, and other countries)

(*1) The IGES Kitakyushu Office^(*) is in charge of organizing meetings and establishing the communication among member cities in order to implement the Kitakyushu Initiative Network, while the Urban Environmental Management Research Unit will provide scientific and technical assistance to the work of the Kitakyushu Office.

(*2) Kitakyushu Office

- In-house
 - ◆ Director in charge of Kitakyushu Office: 1 person
 - ◆ IGES Kitakyushu office members: 2 persons
- Outside
 - ◆ Experts of municipalities participating in the Kitakyushu Initiative Network

7. Project Management

The Urban Environmental Management Project Leader will provide guidance and coordination for the studies on the three themes. The research groups for the research Themes 1 and 2 must remain in close contact. The Project Leader will invite the participation of researchers from outside institutions, especially those in other Asian countries. For the formation and implementation of the Kitakyushu Initiative Network, the Project Leader, who is also the Director in charge of the Kitakyushu Office,

will coordinate all related activities at IGES.

8. Cooperation with Other International Projects

- I.** "Greenhouse Gas Budgets of Mega-cities" under Industrial Transformation and Cities Project by the Asia-Pacific Network (APN)
- II.** "Industrial Transformation Project" by the International Human Dimensions Programme on Global Environmental Change (IHDP)
- III.** "Economic Planning and Environmental Protection Task Force" by the China Council for International Cooperation on Environment and Development (CCICED)

9. Expected External Funding (in progress)

- I.** Research Theme 2 on energy demand and greenhouse gas emissions: APN's "Project on the GHG (greenhouse gas) budgets of Asian mega-cities" (proposal already submitted)
- II.** Research Theme 3 on support for the implementation of the Kitakyushu Initiative Network:
 - ◆ Ministry of the Environment of Japan "Promotion of the Project of Kitakyushu Initiative Network"
 - ◆ The City of Kitakyushu "Promotion of the Project of Kitakyushu Initiative Network" (under negotiation)"
 - ◆ ESCAP

Attachment*

* The Kitakyushu Initiative for a Clean Environment was adopted at the 4th Ministerial Conference on Environment and Development of ESCAP which was held in the City of Kitakyushu from 4 to 5 September, 2000. The IGES Kitakyushu Office provided consultancy to ESCAP in the preparatory work of the Initiative. By request of ESCAP, the Government of Japan and the City of Kitakyushu, the IGES Kitakyushu Office will be in charge of the work necessary for implementing the Initiative, including the holding of meetings, proposal of urban indicators to guide member cities, and conduct of pilot studies to identify best practices in urban environmental management, etc. The attached is the tentative implementation plan of the Initiative, which is under consideration of relevant organizations.

Kitakyushu Initiative for a Clean Environment Implementation Plan (Tentative)

1. Introduction

The 4th Ministerial Conference on Environment and Development in Asia and the Pacific, organized by the Economic and Social Commission for Asia and the Pacific (UN/ESCAP), was held in the City of Kitakyushu, Japan, from 4 to 5 September 2000. At the Conference, a Ministerial Declaration, Regional Message for Rio +10, and a Regional Action Programme for 2001 to 2005 were adopted, in addition to the Kitakyushu Initiative for a Clean Environment (hereafter referred to as the “Kitakyushu Initiative”), which is designed to act as a mechanism for the promotion of programs in the field of “environmental quality and human health,” a priority area in the regional action programme. In considering Kitakyushu’s rich experience in the field of environmental measures, the Kitakyushu Initiative aims to strengthen actions at the local level to improve the environment in urban areas in Asia and the Pacific, and promote cooperation among cities.

2. Contents

The Kitakyushu Initiative for a Clean Environment, which was endorsed at the Conference, is composed of the following areas:

2.1 Policy guidance benefiting from the experience of Kitakyushu

Based on Kitakyushu’s experience, the following actions should be conducted at the local level: strengthening local initiatives, enhancing partnerships, strengthening environmental management capability at the local level, improving the environmental technology base, promoting public and private sector investment in the environment, promoting environmental information and education, and strengthening international environmental cooperation based on local initiatives.

a. Proposed measures

In order to promote the local level actions outlined above, the following measures may be proposed: establishment of a “Kitakyushu Initiative Network for a Clean Environment”; support from the national government, including bilateral donor assistance; strengthened linkages with the academic community; and collaboration with existing international initiatives.

b. Action areas, targets and indicators

Indicators are proposed in order to achieve quantitative targets in enhanced integrated urban planning strategies, improvement in air quality and water quality, hygienic management of wastes and reduction of per capita waste generation, and capacity-building, awareness-raising and stakeholder participation.

c. Recommendations

- Encourage local governments of ESCAP members and associate members to implement the actions and measures proposed in the Kitakyushu Initiative.
- Endorse the establishment of the Kitakyushu Initiative Network for a Clean Environment.
- Agree that the primary function of the Network is to provide a forum to strengthen cooperation among local governments of ESCAP members and associate members.
- Agree that the first meeting of the Kitakyushu Initiative Network will be held with the cooperation of the City of Kitakyushu and relevant organizations.
- Encourage ESCAP members and associate members to assist local governments in implementing the Kitakyushu Initiative, by inter alia dealing with one of the most critical priority areas of improving the urban environment, a priority issue in the regional action programme.
- Request the donor community to provide adequate financial support to implement the Kitakyushu Initiative.

3. Overall Framework of Initiative

ESCAP is considering the following in the overall framework of the Kitakyushu Initiative in the regional action programme (2001-2005).

- MCED 2000 (September 2000)
 - Phase 1 Formation of core activities
 - Designation of governmental focal points (cities, issues)
 - Identification of practical indicators
 - Collection/analysis of cases for best practices/transfer of best practices
 - Selection/implementation of pilot projects
 - Establishment of action-based Network
 - First Network Meeting (November 2001)
 - Phase 2 Implementation of core activities and expansion
- Second Network Meeting (2003)

Phase 3 Region-wide application and review

- Third Network Meeting (2004 / 2005) / Achievements to be reported to MCED 2005

4. First Phase Activities

Work issues for the promotion of the Kitakyushu Initiative during Phase 1 (late 2000 to March 2002) are as follows:

4.1 Identification of Quantitative Indicators to Assess Urban Environmental Improvement

In the implementation of the Kitakyushu Initiative, quantitative indicators and targets will be identified to monitor achievements. In order to achieve these quantitative targets, the establishment of policies and actions with consideration of the experiences of other cities will be necessary and will be a focal point of the Kitakyushu Initiative.

a. Quantitative indicators for achieving policy targets and monitoring the urban environment

...Integrated indicators using data already compiled

- Urban planning (policies, land use, green areas, environmental infrastructure, etc.)
- Air quality (SPM, SO_x, CO₂ emissions, etc.)
- Water quality (BOD, COD, heavy metals, wastewater treatment percentages, re-use percentages, etc.)
- Waste management / treatment (generated amount, treated amount, treatment facilities, management laws and policies, etc.)
- Capacity building / awareness-raising (information disclosure, campaigns, school education, public education, etc.)

b. Indicators to assess urban environmental policies

(Performance assessments)

...While not stated in the endorsed paper, the establishment of criteria for the assessment of best practices is a major issue. IGES will address this important issue through research.

- Achievement of Goals
- Efficiency
- Public Participation
- Partnership
- Technology Development
- Economic Impacts
- Pioneer Spirit

4.2 Implementation of Pilot Programs for improvements in the urban environment

The target of the pilot programs is to engage those local governments involved in concrete activities to achieve the quantitative targets outlined in A-1 above to implement policies taking

into consideration the environmental improvement experiences of other cities, monitor those effects and determine the adaptability of the indicators.

The programs will be implemented in the following order:

- I. Selection of approximately 5 cases from ongoing intercity cooperation projects
- II. Establishment of targets based on quantitative indicators
- III. Implementation of programs through partnership elements
- IV. Assessment of target achievements, verification of indicators

With regard to the necessary funding for the implementation of these programs, linkages with various support programs will be pursued. Additional expenses generated by the pilot programs will be borne by ESCAP.

4.3 Establishment of the Kitakyushu Initiative Network

With cities participating in the pilot programs in 4.2. above and through the participation of a large number of cities, a network that can act as a forum for the promotion of intercity cooperation and information and technology exchange can be created.

Issues in the promotion of these programs are as follows:

a. Network base coordination

- Coordination of functions
- Coordination of working systems
- Coordination of systems (Usage of Kitakyushu urban environment information network is possible)
- Coordination of contents (Coordination of existing information (i.e.: best practices))

b. Selection of local governments participating in network

(recommendations from National governments, city initiatives)

c. Linkages with existing networks

Promotion of linkages with ICLEI, CITYNET, etc. (Links with existing organizations with active bases, in addition to sharing urban information and information related to policy case studies is essential.)

d. Linkages with support organizations

- Practical application of existing support programs
- Project formation support

5. Timeframe for Promotion of Phase 1 (Late 2000~March 2002) (Tentative)

- Early 2001
 - ◆ Development of activity objectives/policies, contents, etc. for discussion

- ◆ (MOFA, EAJ, Kitakyushu City, IGES)
- ◆ Development of quantitative indicators (IGES) (tentative)
- ◆ Development of pilot programs (tentative) (Kitakyushu City, other)
 - Development of network system (tentative) (Kitakyushu City)
- January 2001: Expert Workshop (Hosted by MOFA, EAJ / Tokyo)
 - ◆ Participants: MOFA, EAJ, IGES, Kitakyushu City, Potential participating cities in pilot programs, JICA, JBIC, others (Following domestic workshop, ESCAP will join discussions)
 - ◆ Contents
 - Confirmation of contents of endorsed/agreed upon items during MCED
 - Discussion and consensus on following issues:
 - Activity objectives/policies
 - Duties of concerned organizations, implementation system
 - Timeframe
 - Development of quantitative indicators
 - Development of pilot programs (targeted cities, program contents)
 - Development of network program (base coordination, core composition)
 - Linkages with donor organizations
- April-July 2001: International Expert Workshop (Hosted by ESCAP / Bangkok)
 - ◆ Participants: ESCAP, MOEJ, MOFA, National/local experts, IGES, Kitakyushu City, other
 - ◆ Contents: Same as above domestic expert workshop (Review and consensus on policies)
- April- November 2001
 - Composition of network core
 - Implementation of pilot programs
- November 2001: First Meeting of Kitakyushu Initiative Network (Hosted by ESCAP / Meeting place TBD)
 - ◆ Participants: Representatives from approx. 20 cities, others
 - ◆ Contents:

6. Links with Various Initiatives

In promoting the Kitakyushu Initiative, it is desirable to maintain mutual active links with existing networks that are implementing international environmental cooperation activities at the local level, such as ICLEI and CITYNET, and concerned private organizations, such as KITA, GEC, and ICETT. In addition, it is necessary to establish active cooperative systems with the support programs of such financial institutions as JICA, JBIC, and ADB. Furthermore, the Initiative aims to create links and cooperate with related projects of the United Nations and international research organizations and engage in efficient and effective activities.

- ICLEI Regional Consultants Meeting (March 2001: Australia / Hosted by ICLEI): Introduction and announcement of Kitakyushu Initiative, Development of linkage base with ICLEI
- 2nd Mayors' Asia-Pacific Environmental Summit (May 2001: Honolulu / Hosted by ADB): Introduction and announcement of Kitakyushu Initiative, Invitation/PR for participants in network
- Istanbul +5
- UN/CHS (Habitat) Urban Indicators Programme
- CITYNET
- GEC/UNEP International Environmental Technology Centre
- ICLEI Best Practice Study
- IGES Urban Environmental Management Project
- Asia Europe Environmental Technology Centre
- JICA Development Partnership Project
- JBIC Projects

Urban Environmental Management Project Research Plan

