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REVIEW OF THE IMPLEMENTATION OF THE KITAKYUSHU INITIATIVE FOR A CLEAN ENVIRONMENT

(Item 5 (c) of the provisional agenda)

KITAKYUSHU INITIATIVE FOR A CLEAN ENVIRONMENT: REVIEW OF IMPLEMENTATION AND ACTION PLAN FOR FUTURE ACTIVITIES

SUMMARY

The Kitakyushu Initiative for a Clean Environment was adopted at the fourth Ministerial Conference on Environment and Development in Asia and the Pacific, 2000, with a view to achieving measurable progress in improvement of the urban environment in major cities in the region. Since its inception in 2001, various network activities have been organized to address issues in three focus areas, namely, air quality management, solid waste management, and water quality management. The present document reviews the implementation of the Kitakyushu Initiative between 2001 and 2004, assesses its achievements and presents the action plan for future activities adopted by mayors and senior officials at the Third Meeting of the Kitakyushu Initiative. The Meeting is invited to review the implementation of the Initiative and the action plan, with a view to adopting the plan and providing guidance on its future implementation.
CONTENTS

INTRODUCTION ............................................................................................................................ 1

I. IMPLEMENTATION OF NETWORK ACTIVITIES .......................................................... 1
   A. Organization of thematic seminars ................................................................. 2
   B. Implementation of pilot projects/activities ..................................................... 2
   C. Compilation, analysis and dissemination of successful practices .................. 3
   D. Development and application of indicators .................................................... 5

II. ASSESSMENT OF ACHIEVEMENTS ................................................................................ 6

III. ACTION PLAN FOR FUTURE ACTIVITIES ..................................................................... 8
   A. Mission statement ......................................................................................... 8
   B. Selected areas for action ............................................................................... 8
   C. Means of implementation .............................................................................. 13
   D. Monitoring, evaluation and reporting mechanism ......................................... 14

IV. ISSUES FOR CONSIDERATION ........................................................................................ 14

LIST OF TABLES

1. Pilot projects/activities under the Kitakyushu Initiative ...................................... 4
2. Application of quantitative indicators under the Kitakyushu Initiative .................. 5
3. Objectives and activities for priority areas under future implementation of the Kitakyushu Initiative ......................................................... 9
INTRODUCTION

1. The Kitakyushu Initiative for a Clean Environment was adopted at the fourth Ministerial Conference on Environment and Development in Asia and the Pacific, 2000, held in Kitakyushu, Japan, to address increasing urban environmental deterioration. The Initiative, recognized as a type 1 initiative by the World Summit on Sustainable Development, is a mechanism for the implementation of priority areas on environmental quality and human health of the Regional Action Programme for Environmentally Sound and Sustainable Development, 2001-2005.

2. The mandate of the Kitakyushu Initiative is to achieve measurable progress in improvement of the urban environment in major cities in the Asian and Pacific region, mainly through local initiatives aiming at control of air and water pollution and minimization of all kinds of wastes. More specifically, the Initiative involves a three-pronged approach: (a) conducting thematic seminars and national training workshops aimed at encouraging the transfer of successful practices and promoting intercity environmental cooperation in country-specific contexts; (b) implementing pilot activities that will identify and review different approaches to urban environmental management in selected cities in the region; and (c) establishing a network for information dissemination and capacity-building. These are being achieved through the application of technical, institutional, regulatory and participatory measures.

3. As a follow-up to the Ministerial Conference in 2000, ESCAP, in collaboration with the Government of Japan and the Institute for Global Environmental Strategies (IGES), has initiated a range of activities at the national and regional levels for the implementation of the Kitakyushu Initiative. Since its inauguration at the First Meeting of the Kitakyushu Initiative Network in Kitakyushu, Japan, in November 2001, the number of member cities of the Network has increased from 20 to 60 cities in 18 countries.

4. As requested by the fourth Conference, the status of implementation of the Kitakyushu Initiative is to be reported to the fifth Conference in 2005. For this purpose, the Third Meeting of the Kitakyushu Initiative Network, held in Kitakyushu, Japan, in August 2004, reviewed comprehensively the network activities implemented between 2001 and 2004 and adopted an action plan for future activities, together with a message from mayors and senior officials to the Conference in 2005.

I. IMPLEMENTATION OF NETWORK ACTIVITIES

5. The Kitakyushu Initiative conducts four types of interrelated activities: (a) organization of thematic seminars and training for capacity-building; (b) implementation of pilot projects/activities; (c) compilation, analysis and dissemination of successful practices; and (d) development and application of quantitative indicators. The implementation of activities is reviewed at the Network meetings, which also provide an important mechanism for promoting the exchange of information and experiences and enhancing intercity cooperation.
A. Organization of thematic seminars

6. Thematic seminars were conducted to enhance understanding of the current state of the urban environment and build the capacity of local governments in urban environmental management through the sharing of information on both successful and unsuccessful experiences. Thematic seminars were held on issues identified as critical by local governments. Seven thematic seminars were organized, on solid waste management, public-private partnerships for urban water supply and wastewater management, urban air quality management, industrial relocation, public participation in urban environmental management, international cooperation for local initiatives, and the use of information and communication technology (ICT) in urban environmental management.

7. These seminars enhanced information exchange on substantive issues under each theme, particularly by identifying major barriers and corresponding measures, including successful practices. The seminars facilitated discussions on the transferability and applicability of successful practices as well as the development and implementation of suggested policies and related activities. In addition to specific suggestions in each area, the key recommendations proposed at the seminars which apply to air, water and solid waste management are highlighted below.

- Dissemination of environmentally friendly methods and technologies should be promoted for transfer of experiences
- Use of information technologies should be strengthened for better environmental management
- Commitment of local authorities, stakeholder involvement and community-based approaches are essential for urban environmental improvement and should be promoted
- Public-private partnerships have great potential for improving the provision of cost-effective and efficient services; thus, it is important to enhance the role of the private sector in urban environmental improvement
- A systematic and integrated approach should be adopted by cities in dealing with urban environmental problems
- It is important to link local initiatives with international support mechanisms (multilateral, bilateral and intercity cooperation)

8. As follow-up activities, national seminars were held with the participation of national and local governments to further pursue the critical environmental issues discussed at the thematic seminars in country-specific contexts. These national seminars provided a forum and included the development of institutional mechanisms at the national level for formulating specific strategies in the implementation of the Kitakyushu Initiative. Pilot projects/activities were developed following the conclusion of the thematic seminars, as described in the next section.

B. Implementation of pilot projects/activities

9. Pilot projects/activities have been implemented to gauge the effectiveness of specific approaches and concrete measures in urban environmental improvement and to develop models which
could be transferred to other cities in the region. These pilot projects and studies essentially cover the following features: (a) action aiming at tangible improvement in environmental quality and human health; (b) progress to be quantitatively monitored using appropriate indicators; (c) enhanced participation by local stakeholders; and (d) encouragement of a replication approach. In some cases the objective is to develop a pilot project which could be transformed later into a large investment project.

10. Pilot projects/activities are usually identified by local governments and are planned, developed and implemented in close collaboration with ESCAP, IGES and other relevant organizations, with focus on the following areas: solid waste management, urban water conservation, urban air quality management, energy efficiency, industrial pollution control, and the promotion of instrument and tools for integrated urban environmental management. The activities are carried out through the designation of a community as a model area, where the effects of inputs and outputs are visible to local residents; in other words, where it can be clearly determined how the actions of stakeholders contribute directly to the achievement of the target.

11. Altogether 14 pilot projects/activities have been undertaken or proposed under the Kitakyushu Initiative: six have been completed, two are under implementation, three are under preparation and three are under consideration. Table 1 gives a summary of the pilot projects/activities under the Kitakyushu Initiative.

C. Compilation, analysis and dissemination of successful practices

12. Cities have gained valuable experience in their efforts to improve the urban environment, which could be shared and/or transferred to other cities. To this end, the Kitakyushu Initiative has compiled and analysed a portfolio of successful practices. It is expected that these good practices could facilitate possible replication and the formulation of future projects to address critical environmental issues.

13. In this connection, guidelines for reporting successful practices in urban environmental management have been developed based on the following criteria: (a) a clear demonstration of accomplishment quantitatively; (b) the incorporation of the necessary elements of success, i.e. target-setting and achievement, the successful use of regulatory and economic instruments and voluntary approaches, improvement in institutional structures, financing, technology use, education, monitoring and evaluation etc; and (c) replicability and transferability to other cities. The collection and analysis of successful practices have been carried out in collaboration with local governments, research institutions, academia and non-governmental organizations. Some successful practices were collected from secondary sources.

14. Altogether 45 cases of successful practices on urban environmental management were collected and analysed from April 2001 to March 2004 in four areas: air quality management, water quality management, solid waste management and integrated urban environmental management. Most of these practices were discussed at the thematic seminars. The portfolio of successful practices thus compiled in a database is available at the Kitakyushu Initiative web site <http://www.iges.or.jp/kitakyushu/practices_outline.htm>.
<table>
<thead>
<tr>
<th>Pilot projects/activities</th>
<th>Implementing city</th>
<th>Status</th>
<th>Achievements or targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion of recycling and reduction of waste</td>
<td>Nonthaburi, Thailand</td>
<td>Completed</td>
<td>Through enhancing public participation, recycling increased from 5.3 to 22 per cent and waste decreased by 32 per cent in two model villages</td>
</tr>
<tr>
<td>Feasibility study on the privatization of industrial wastewater treatment</td>
<td>Weihai, China</td>
<td>Completed</td>
<td>Development of public-private partnerships for the construction and operation of a sewage treatment plant</td>
</tr>
<tr>
<td>Multi-stakeholder approach to climate change</td>
<td>Puerto Princesa, Philippines</td>
<td>Completed</td>
<td>A 650-kg decrease in CO₂ emissions and strengthened air pollution countermeasures</td>
</tr>
<tr>
<td>Pilot study on urban air quality management</td>
<td>Chongqing, China</td>
<td>Completed</td>
<td>The study demonstrated significant improvement in SO₂ concentration, rain acidity and frequency of acid rain; and identified successful policy interventions</td>
</tr>
<tr>
<td>Solid waste management</td>
<td>Dhaka</td>
<td>Completed</td>
<td>Improved public awareness through local and mass media campaigns and enhanced stakeholder participation in at-source separation, house-to-house collection and primary disposal of solid waste</td>
</tr>
<tr>
<td>Construction of small-scale treatment facilities for domestic wastewater</td>
<td>Korat, Thailand</td>
<td>Completed</td>
<td>Twelve simple water treatment plants constructed, water quality improved, public participation in water quality management enhanced</td>
</tr>
<tr>
<td>Stakeholder awareness improvement for air quality management</td>
<td>Surabaya, Indonesia</td>
<td>Completed</td>
<td>To increase stakeholder awareness and participation in urban air quality improvement</td>
</tr>
<tr>
<td>Water quality improvement</td>
<td>Cebu, Philippines</td>
<td>Ongoing</td>
<td>To improve the water quality of the Guadalupe River by establishing a simple wastewater treatment facility</td>
</tr>
<tr>
<td>Pilot study on air quality monitoring</td>
<td>Tehran</td>
<td>Under preparation</td>
<td>To examine the present monitoring system of air quality in Tehran and make recommendations on its suitability and expansion and to make suggestions on how to utilize the data in air quality management in Tehran, particularly through stakeholder involvement</td>
</tr>
<tr>
<td>Energy efficiency improvement</td>
<td>Ulaanbaatar</td>
<td>Under preparation</td>
<td>To promote energy efficiency and reduce air pollution through energy conservation and efficiency measures</td>
</tr>
<tr>
<td>Water-use efficiency</td>
<td>To be determined</td>
<td>Under preparation</td>
<td>To improve water-use efficiency by promoting public awareness of water conservation and preparation of water-use efficiency plans</td>
</tr>
<tr>
<td>Water pollution control</td>
<td>Semarang, Indonesia</td>
<td>Under consideration</td>
<td>To expand the ongoing pilot project for water quality improvement in Bajak River</td>
</tr>
<tr>
<td>Solid waste management</td>
<td>Yangon</td>
<td>Under consideration</td>
<td>To establish a sanitary landfill disposal site and introduce sanitary disposal practices</td>
</tr>
<tr>
<td>Conservation of heritage sites</td>
<td>Siem Reap, Cambodia</td>
<td>Under consideration</td>
<td>To help to stabilize and restore ecosystem functions and services and improve the livelihood of local people</td>
</tr>
</tbody>
</table>
D. Development and application of indicators

15. The Kitakyushu Initiative recommends setting quantitative targets and indicators along with policy decisions in urban environmental management. Setting quantitative indicators makes it easier to measure the effectiveness and degree of success of policies, encourages the undertaking of regular surveys and adjustment, promotes stakeholder participation in various stages of decision-making and implementation, and helps to assess the results in the transfer of successful practices.

16. The development and application of indicators under the Kitakyushu Initiative are usually combined with the implementation of pilot projects/activities. All pilot projects/activities are implemented with the purpose of verifying the achievement of various targets and results. The indicators used in these individual pilot projects/activities are essentially those chosen by the implementing agencies according to the specific needs of each project/activity. Table 2 cites examples.

Table 2. Application of quantitative indicators under the Kitakyushu Initiative

<table>
<thead>
<tr>
<th>Implementing city</th>
<th>Project summary</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chongqing, China</td>
<td>Air pollution improvement</td>
<td>Sulphur dioxide density</td>
</tr>
<tr>
<td>Weihai, China</td>
<td>Treatment of industrial wastewater through public-private partnerships</td>
<td>Emission load (BOD, COD)</td>
</tr>
<tr>
<td>Nonthaburi, Thailand</td>
<td>Waste reduction</td>
<td>Waste generated, recycling ratio</td>
</tr>
<tr>
<td>Korat, Thailand</td>
<td>Urban river quality improvement</td>
<td>River quality</td>
</tr>
<tr>
<td>Cebu, Philippines</td>
<td>Comprehensive urban environmental policies</td>
<td>River quality, waste generation</td>
</tr>
<tr>
<td>Puerto Princesa,</td>
<td>Urban transport improvement</td>
<td>Air pollution load, greenhouse gas emissions, health/economic impacts</td>
</tr>
<tr>
<td>Philippines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surabaya, Indonesia</td>
<td>“Blue Sky” programme</td>
<td>Air pollution levels (PM10, SO$_2$, O$_3$, NO$_2$, CO), air quality indicators (ISPU/PSI) (planned)</td>
</tr>
<tr>
<td>Dhaka</td>
<td>Waste management</td>
<td>Waste generation, public participation/awareness-raising</td>
</tr>
<tr>
<td>Ulaanbaatar</td>
<td>Improvement in household fuel sources</td>
<td>Air pollution indicators (indoors/outdoors)</td>
</tr>
</tbody>
</table>
17. The lessons learned from the development and application of quantitative indicators include the following: the application of specific indicators should be based on specific situations and concerns of different municipalities; visible and easily understandable indicators are most useful; indicators which help to assess local residents’ actions towards target achievement are most effective in pilot projects implemented in small communities; and linkages with global issues might be a clue for developing universally applicable indicators.

II. ASSESSMENT OF ACHIEVEMENTS

18. The Kitakyushu Initiative has made substantial progress in the capacity-building of local governments by:

- Initiating and implementing pilot projects/activities
- Organizing thematic seminars on critical issues in urban environmental management
- Supporting and monitoring ongoing intercity cooperation activities
- Dissemination of the portfolio of successful practices collected and analysed for possible replications in other cities
- Development of quantitative indicators for urban environmental management
- Establishment of the Kitakyushu Initiative web site, which greatly facilitates the development of the Network and the dissemination of information
- Strengthening of environmental cooperation based on local initiatives for encouraging the transfer of technology and good practices

19. The Kitakyushu Initiative has made substantial progress in the capacity-building of local governments. An important aspect of the Initiative is the strengthening of environmental cooperation based on local initiatives, which is essential for encouraging the transfer of technology and successful practices. For example, local governments in Bangladesh, China, Indonesia, the Philippines, Thailand and Viet Nam have taken such initiatives in a variety of sectors, including air, water, solid waste and industrial relocation. Dialogues for cooperation have also been held with ADB, the Canadian International Development Agency, the Regional Network of Local Authorities for the Management of Human Settlements, the International Council for Local Environmental Initiatives, the Japan Bank for International Cooperation, the Japan International Cooperation Agency and the World Bank. There has also been collaboration in technical assistance and information sharing with relevant organizations such as UNEP and UN-HABITAT.

20. Feedback from a questionnaire circulated among the member cities indicates that the cities have benefited directly and indirectly from the Initiative through training, technical or financial
support, demonstration projects, the dissemination of successful practices from the web site and exchange of information in seminars and Network meetings. Public awareness and participation in urban environmental management have increased, particularly through stakeholder involvement in the implementation of pilot projects/activities. A number of cities have used the Network as a base for expansion of their international environmental cooperation activities, including agreements on the training of personnel and memorandums of understanding signed between cities for twinning or the establishment of cooperative relationship in the field of environment.

21. The Kitakyushu Initiative contributed particularly to improvements in local environmental governance in a number of cities in Asia and the Pacific. Awareness and understanding of the effective policy framework have been significantly upgraded by the Kitakyushu Initiative, especially through promoting the adoption of holistic approaches to local environmental management; defining realistic and flexible environmental standards and targets; benchmarking the progress of implementation using quantitative indicators; monitoring, reporting and enhanced public communication of the implementation status that collectively have facilitated participatory and transparent decision-making in local environmental administrations. Public awareness and participation in urban environmental improvement have been improved, particularly by the demonstration of intensive stakeholder involvement in the implementation of pilot projects/activities. Municipalities and local environmental authorities have become better equipped with a variety of options for policy, financial and technological instruments that have been proved effective elsewhere in the region.

22. With regard to solid waste management, regulations have been established in most of the member cities. Various user charges have been introduced to augment financial support for the implementation of solid waste management plans and suitable technologies are being adapted for this purpose. Community-based activities promoted under the Initiative in cities such as Nonthaburi, Thailand, and Dhaka are the most important aspect of improved solid waste management.

23. With the decentralization of urban water and wastewater management in some countries, laws and regulations on water pollution control and maintenance of drinking water quality have been introduced at the local level. Further, cities are strengthening their institutional capacity to optimize the management process. Tariffs are being redesigned and innovative mechanisms such as public-private partnerships are being introduced to improve financing.

24. In order to control air pollution, new vehicles, hi-tech rapid mass transit systems and fuel conversion technologies are being widely adapted. Public information and awareness are high on the agenda of many cities in the introduction of various standards, fuel conversion, and the greening of cities. Stakeholder participation in decision-making is being promoted to enable the introduction and implementation of regulations and financial mechanisms in many cities. The exchange of information and experience in this regard through the Kitakyushu Initiative has proved valuable.

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III. ACTION PLAN FOR FUTURE ACTIVITIES

25. Based on the successful implementation of the Kitakyushu Initiative and taking into account the necessity to further address urban environmental challenges, an action plan was developed and reviewed at the Third Meeting of the Kitakyushu Initiative Network, with a view to guiding its future activities between 2005 and 2010.

A. Mission statement

26. The mission statement of the Kitakyushu Initiative is to achieve measurable improvements in urban environmental quality and human health in the Asian and Pacific region by promoting local initiatives to control air and water pollution, minimize all kinds of wastes and alleviate other emerging urban environmental problems.

B. Selected areas for action

27. Two broad themes have been identified for activities for the period 2005-2010, namely, urban environmental issues directly related to urgent needs in cities, i.e. poverty and human health, and long-term vision and capacities for environmentally sound and sustainable management of cities. Under these two themes, the following have been selected as the priority areas for the future implementation of the Initiative:

(a) Urban environmental issues directly related to urgent needs in cities, i.e. poverty and human health, including:
   - Solid waste management
   - Air quality management
   - Water conservation and wastewater treatment

(b) Long-term vision and capacities for environmentally sound and sustainable management of cities, including:
   - Integrated urban environmental management

28. To carry out activities in these priority areas, the Kitakyushu Initiative will maintain its ongoing implementation mechanisms for the promotion of effective local environmental initiatives, i.e. capacity-building through training, thematic seminars and implementation of pilot projects, technology transfer through the sharing of successful practices, promoting the use of indicators for measuring success, strengthening intercity cooperation through twinning and building partnerships with all stakeholders, including international initiatives through networking.

29. The objectives to be achieved and the corresponding activities to be carried out are listed in table 3.
### Table 3. Objectives and activities for priority areas under future implementation of the Kitakyushu Initiative

<table>
<thead>
<tr>
<th>Priority areas</th>
<th>Objectives</th>
<th>Planned activities</th>
</tr>
</thead>
</table>
| Solid waste management       | ● Strengthen human and institutional capacity-building in municipal solid waste management  
                              | ● Remove barriers to solid waste management and develop appropriate methodologies to address them  
                              | ● Improve information-sharing on solid waste management  
                              | ● Enhance community participation in the collection and recycling of waste and strengthen public-private partnerships for solid waste management  
                              | ● Assist cities in integrating the mitigation of greenhouse gases in municipal solid waste management  
                              | ● Promote linkages between urban solid waste management and the Clean Development Mechanism (CDM) in member cities  
                              | ● Conduct reviews on existing solid waste management policies and identify methodologies under a common framework that could be replicated for improvement of solid waste management. The review could cover institutional structure, planning process, regulatory and economic instruments, voluntary approaches, financing, technology, public participation, etc. Based on the review outcomes, appropriate methodologies could be identified and replicated to address specific problems in solid waste management at the local level  
                              | ● Upgrade the existing solid waste management section of the successful practices database on the Kitakyushu Initiative Network web site to an online regional resource facility for solid waste management. The resource facility will include information on innovative practices on community-based solid waste management; online self-standing and moderated training programmes; database on institutions, experts, private sector suppliers, training providers, and financial institutions related to solid waste management; and policies as well as concept papers on community-based solid waste management  
                              | ● Enhance the capacity-building of local governments to help to identify potential CDM projects and assist them in the project design and development process  
                              | ● Identify and conduct pilot projects for solid waste management and recycling with the participation of the community and the private sector  
                              | ● Promote the development and application of quantitative indicators in various projects on solid waste management and evaluate their effectiveness  
                              | Air quality management       | ● Promote improvement in air quality to                                                                                                                                                                                                                                                                                                                                                   | ● Conduct reviews on existing air quality management policies and identify  
<p>| |
|                                                                                                                                           |</p>
<table>
<thead>
<tr>
<th>Water conservation and wastewater treatment</th>
<th>Improve the coverage and efficiency of water supply and sanitation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Conduct reviews on existing water conservation and wastewater treatment policies and identify methodologies under a common framework that could be replicated for water conservation and wastewater treatment. The review</td>
</tr>
</tbody>
</table>

- meet WHO standards or local standards where they exist
- Enhance public awareness and stakeholder participation in air quality management
- Identify, disseminate and replicate models on energy efficiency and air quality improvement
- Strengthen institutional capacity to formulate and implement integrated policies in air quality management, with focus on sustainable urban transportation and the mitigation of greenhouse gases
- Promote methodologies for the implementation of integrated policies in air quality management through stakeholder participation
- Promote partnerships among various stakeholders for air quality management, including national and local governments, the private sector, academia, the community and the media for air quality improvement. Efforts will also be made to promote international cooperation at the local level
- Identify and conduct pilot projects or activities on public awareness improvement, energy efficiency, the use of information and communication technology in air quality management, and sustainable urban transport management, including fuel pricing, cleaner fuel, application of a user charge to vehicle purchase and use, alternative fuels and vehicles
- Strengthen the capacity of local governments to identify and implement potential CDM projects
- Promote the development and application of quantitative indicators in various projects on air quality management and evaluate their effectiveness
- Enhance community participation in water conservation and strengthen public-private partnerships for water supply and wastewater treatment
- Establish, disseminate and promote replication of models on water conservation
- Strengthen institutional capacity for the formulation and adoption of sound pricing policies

Could cover the institutional structure, the planning process, regulatory and economic instruments, voluntary approaches, financing, technology and public participation. Based on the outcome of the review, appropriate methodologies could be identified and replicated to address specific problems in water conservation and wastewater management at the local level
- Conduct pilot projects on water conservation and document the models for possible replication
- Promote partnerships among various stakeholders for water conservation and wastewater treatment, including national and local governments, the private sector, academia, the community and the media. Efforts will also be made to promote international cooperation at the local level
- Identify appropriate pricing policies and promote the implementation of user charges to bridge the gap between affordability and cost
- Promote the development and application of quantitative indicators in various projects on water conservation and wastewater treatment and evaluate their effectiveness

<table>
<thead>
<tr>
<th>Integrated urban environmental management</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Promote integrated urban environmental planning strategies in member cities, which cover air and water quality, the appropriate use of land, water supply and demand management, energy supply and</td>
</tr>
<tr>
<td>- Conduct reviews on existing policies and identify methodologies under a common framework that could be replicated for integrated urban environmental management. This would help to evaluate policies in terms of long-term goals and necessary capacity for environmentally sound and sustainable management. The review could cover the institutional structure, the planning process, regulatory and economic instruments, voluntary</td>
</tr>
<tr>
<td>Demand management, sanitation and solid waste management etc.</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>- Strengthen human and institutional capacity for integrated urban environmental management</td>
</tr>
<tr>
<td>- Promote appropriate tools for integrated urban environmental management, such as information and communication technology (ICT)</td>
</tr>
<tr>
<td>- Develop long-term vision and capacity for the environmentally sound and sustainable management of cities, to achieve a society aiming at the sustainable use of resources and zero emission</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approaches, financing, technology application, public participation etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Based on the outcome of the review, appropriate methodologies could be identified and replicated to address specific problems in integrated urban environmental management at the local level</td>
</tr>
<tr>
<td>- Provide assistance in formulating and implementing integrated and sustainable urban environmental plans and strategies, with focus on the integration of solid waste management, air quality management, water conservation and wastewater treatment, etc., in urban environmental planning</td>
</tr>
<tr>
<td>- Enhance local capacity-building in integrated urban environmental management through the conduct of training programmes</td>
</tr>
<tr>
<td>- Conduct pilot projects to promote the use of ICT in integrated urban environmental management</td>
</tr>
<tr>
<td>- Collect, analyse and disseminate successful practices and promote their replication</td>
</tr>
</tbody>
</table>
C. Means of implementation

30. The following means of implementation will be used for the activities in the above areas.

1. Networking

31. The Network will be maintained and strengthened to link cities as well as existing urban initiatives, to share experiences and information and to facilitate the systematic transfer of successful practices and technology. As key focal points, national Governments would be encouraged to assist in the facilitation of local environmental initiatives being taken in the implementation of the Kitakyushu Initiative. Network meetings will be held every year, or every two years, to review the status of implementation of the Kitakyushu Initiative. Specific themes will be identified for each Network meeting and progress related to the themes will be evaluated by member cities and reviewed at the meeting.

2. Intercity cooperation and international cooperation based on local initiatives

32. Intercity cooperation is one of the key features of the Kitakyushu Initiative, and this will be further strengthened in the future. Intercity transfer of technology, know-how packages, good practices and successful development models will be encouraged through the conduct of policy dialogues, twinning of cities and collaboration with the media. Special efforts will be made to link local initiatives with international cooperation schemes with a view to ensuring financial, technical and information support, seeking synergies and forging mutually beneficial partnerships.

3. Kitakyushu Initiative Award for Urban Environmental Improvement

33. An award system will be established and institutionalized to acknowledge model environmental cities within the Kitakyushu Initiative. Criteria have been identified, and will be finalized, for the institution of the award system.

4. Technology transfer

34. Technology transfer is one of the critical factors in replicating experience from one city to another. The Kitakyushu Initiative promotes and facilitates the transfer of environmentally sound or clean technologies along with supportive measures and capacity-building. Assessment of local situations will be conducted to assist the identification of appropriate technologies. Technology transfer will be carried out through intercity cooperation and networking with other initiatives aiming to diffuse environmentally sound technologies in the region. Cooperation with the scientific community would also enhance the capacity of local governments to deal with technical information.
5. Use of ICT in urban environmental management

35. The advancement of ICT provides an innovative way for access to environmental information as well as an effective tool for urban environmental management. It would facilitate and accelerate public participation in the efforts towards urban environmental improvement as well as the information and experience sharing among local governments. The Kitakyushu Initiative will take concrete action to improve the use of ICT in environmental management through the conduct of training programmes and pilot projects and the use of the web site for the dissemination of best practices.

6. Financing mechanism

36. For the further implementation of the Kitakyushu Initiative, it is essential to identify practical and innovative ways to mobilize all possible financial resources from the donor community. In addition to regular financial support from the donor community, it is important to explore, to the fullest extent possible, support from various international cooperation schemes and multilateral financial institutions, such as UNDP, ADB and the Global Environment Facility. Policy dialogues will be carried out with donor agencies on the possible replication of pilot projects and the potential for upgrading them to investment projects. With the enhancement of multi-stakeholder participation, it is expected that additional resources can be facilitated through supportive measures.

D. Monitoring, evaluation and reporting mechanism

37. Periodical reviews will be conducted in the implementation process by using existing quantitative indicators and developing suitable indicators to measure achievements. Network meetings will be organized every year, or every two years, to review the progress made by the member cities in the selected focus areas. Member cities are responsible for making a progress or final report on ongoing or completed Network activities. The final review and evaluation of the implementation of the Kitakyushu Initiative will be conducted prior to the sixth Conference on Environment and Development in Asia and the Pacific and the evaluation report will be submitted for the consideration of the ministers at the Conference.

IV. ISSUES FOR CONSIDERATION

38. The Meeting may wish to review the activities implemented under the Kitakyushu Initiative from 2001 to 2004 as well as the action plan for future activities of the Initiative adopted by mayors and senior officials at the Third Meeting of the Kitakyushu Initiative Network, held in August 2004. The Meeting is invited to provide guidance on future implementation of the Initiative and adopt the action plan.