

**Tripartite Joint Research on  
Environmental Management in Northeast Asia  
(Summary for Policymakers)**

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**January 2008**

## Summary for Policymakers

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## **Summary for Policymakers**

### **1. Background of Research**

Northeast Asia (NEA) generally refers to the region including the geographically adjacent countries of China, the Democratic People's Republic of Korea (DPRK), Japan, Mongolia, the Republic of Korea (ROK) and the Russian Federation. As a result of rapid economic growth and urbanisation in the region, various environmental issues have emerged in each country. Due to geographic proximity, as well as interrelated socioeconomic activities, many environmental problems have become trans-boundary in nature, requiring collaborative efforts by NEA countries toward solutions.

Through years of efforts, various environmental cooperation mechanisms and projects have emerged to tackle the environmental problems of the region. While these efforts are a positive sign of the active stance of countries toward regional environmental cooperation, issues of effective performance remain to be addressed. Government officials, researchers, and other relevant parties involved in regional environmental cooperation have raised issues on the operational capacity and effectiveness of the environmental cooperation mechanisms. Although much discussion and research has taken place on environmental issues and cooperation regimes in the NEA region, little has touched upon overall environmental management in the region, such as review and assessment of achievements, problems with existing mechanisms, and ways to unify and coordinate different mechanisms. This problem was noted and addressed during the 6<sup>th</sup> Tripartite Environment Ministers Meeting (TEMM).

This research is a response to these issues and to TEMM's call for action. It aims to contribute to dialogue on how to better improve overall environmental cooperation in the NEA region. Initiated in December of 2005, this research was commissioned by the environmental ministries of China, Japan and the Republic of Korea and jointly carried out by the Policy Research Center for Environment and Economy (PRCEE) of the Ministry of Environmental Protection of China, the Institute for Global Environmental Strategies (IGES) in Japan, and the Korea Environment Institute (KEI).

### **2. Objective of Research**

The objective of this research is to explore potential and efficient ways to improve the overall efficacy of environmental cooperation endeavours in the NEA region. Focus is put upon improvement of performance and better coordination between mechanisms. It aims to promote coherent and coordinated measures for the NEA region, and to further contribute to the ultimate goal of sustainable development in the region through appropriate environmental governance.

### **3. Environmental Challenges for the NEA Region**

Countries in the NEA region are diverse in many respects, such as geography, territorial size, natural conditions, population, development level and the like. According to the Human Development Report of the United Nations Development Programme (UNDP 2007), Japan, the ROK and the Russian Federation are ranked 8th, 26th and 67th respectively among 70 countries categorised as exhibiting “high human development,” based on human development index data of 2005. China and Mongolia are ranked 81st and 114th respectively among 85 countries categorised as exhibiting “medium human development”.

NEA region countries share common characteristics as well, with a few exceptions. They are confronting increases in population, proportion of urban population, and economic activity, hence growth in numbers of motor vehicles, use of electricity and energy consumption. Internally, these countries are reforming and improving their modes of social and economic development. Externally, they continue to open up to each other and strengthen economic relations toward mutual benefit. While NEA countries are linked to each other more and more via international trade and direct investment, they are at the same time interlinked by environmental problems in the region.

Eight environmental problems have been the focus of concern for NEA region countries. They are, 1) air pollution, 2) land degradation, 3) dust and sandstorms (DSS), 4) marine environmental issues, 5) biodiversity loss, 6) wastes, 7) chemical pollution, and 8) environment and energy. The identified environmental issues are in line with results of a survey conducted in China, Japan and the Republic of Korea as a part of this research project. According to survey results, air pollution, DSS, environment and energy, trans-boundary movement of waste and biodiversity loss rank in order as the most serious environmental issues in the region, the solutions for which require regional cooperative efforts.

Due to the scale of environmental issues and resources and capacity to deal with them, it will be difficult for the region to solve all its problems at the same time. It is more feasible to prioritise the issues and tackle major environmental problems first, addressing others in the future. Further, in addition to focused efforts on various major environmental issues, NEA region countries must also consider all environmental issues as a whole and in relation to economic and social development. Therefore, it is necessary to implement integrated strategies for sustainable development at national and regional levels. In this regard, generic mechanisms as well as specific mechanisms designed to deal with regional environmental issues have been developed.

#### **4. Review of Current Environmental Cooperation in Northeast Asia**

To evaluate the performance of the current environmental cooperation system in the NEA region, this joint research project selected five environmental cooperation mechanisms (ECMs) and one activity, which it considers to be the main mechanisms/activity in effect to address various environmental issues in the region. They are the Tripartite Environment Ministers Meeting (TEMM), the North-East Asia Sub-regional Programme for Environment Cooperation (NEASPEC), the Northeast Asian Conference on Environmental Cooperation (NEAC), the Acid Deposition Monitoring Network in East Asia (EANET), the Action Plan for the Protection, Management and Development of the Marine and Coastal Environment of the Northwest Pacific Region (NOWPAP), and the Regional Technical Assistance on Dust and Sandstorm (DSS-RETA). According to their different scopes and functions, the six environmental cooperation mechanisms/activity are categorised into two broad types, namely generic ECMs and specific ECMs/activity. Mechanisms in the former category deal with a broad range of environmental issues and have multiple functions, and those in the latter focus on specific environmental issues. In this study, TEMM, NEASPEC and NEAC are considered generic ECMs, while EANET, NOWPAP and DSS-RETA are considered specific ECMs/activity. The current status of these six mechanisms/activity, the main mechanisms in place to handle regional environmental issues, are evaluated to be as follows.

##### **TEMM**

- TEMM has played an important role in achieving common understanding of pressing environmental issues in the NEA region. It serves as a forum for exchanging information on both regional activities and implementation of domestic environmental policies. TEMM has evolved to initiate and implement cooperative projects within and beyond the scope of the three participating countries.
- In order to meet its objectives, TEMM has carried out various activities in specific issue areas, awareness-building and stakeholder participation.
- TEMM has effectively implemented decisions reached at meetings.
- TEMM may consider to design institutions to mobilise the participation of other stakeholders.
- TEMM, in its tenth year, has enhanced trust-building among member countries and improved working and human relationships among ministers and senior officials.

##### **NEASPEC**

- NEASPEC's objectives can be reviewed to reflect the changing needs of the region and to endow the mechanism with a stronger *raison d'être* and a clear focus to harness its full potential.
- A practical level of cooperation has been reached through the implementation of projects related to capacity building, yet projects have been small in scale with short time frames, and there is still work to do regarding domestic follow-up.

- Most of NEASPEC's funds have been allocated to project implementation, yet considering the seriousness of environmental problems in the region, the scale of projects has been small. The implementation process for projects can be speeded up if the participating countries can reach consensus in a easier way.
- Levels and backgrounds of meeting participants are different among member states. NEASPEC has not yet institutionalised stakeholder participation.
- While NEASPEC has the widest geographical coverage compared to other mechanisms, but it has a lower level of political representation.

#### **NEAC**

- NEAC is a unique forum for multi-stakeholder policy dialogue in the region.
- NEAC has addressed various environmental issues, as well as topics on environmental governance, throughout its meetings.
- While the participation of five NEA region countries has been secured through NEAC, its financial resources could be utilised more efficiently if NEAC were to be organised and its activities coordinated with other environmental cooperation mechanisms.
- While various stakeholders are present in NEAC, there is unbalanced participation among countries in terms of number and background of representatives.
- NEAC has fully served its original but seemingly short-term purpose and objective. After a thorough review, this scheme may be transformed into a subsidiary body of another regional mechanism. In so doing, the benefits of such a body may be optimised.

#### **EANET**

- The current activities of EANET are mainly focused on the assessment of scientific information on acid deposition.
- EANET has published a significant amount of scientific assessment reports related to acid deposition, as well as carried out training activities.
- The Japanese government has contributed a lot to the budget for EANET activities.
- Participants in EANET activities are mainly limited to government officials and academic experts, particularly at various meetings. In capacity development and awareness-building activities, other stakeholders, such as NGOs and civil societies, are represented.
- More financial contributions from participating countries can further promote and enhance EANET activities.

#### **NOWPAP**

- NOWPAP provides appropriate geographical coverage and comprehensive objectives with flexibility, which enables member countries to address any urgent and/or emerging issues.
- So far, notable achievements of NOWPAP include the establishment of institutional arrangements, a basis for information gathering and sharing, and some concrete working plan and implementation mechanisms.

- NOWPAP has gained momentum through the establishment of RACs and the two RCU offices; however, issues of gaps and overlaps in the activities of RACs are yet to be resolved.
- NOWPAP should consider securing the participation of relevant ministries and agencies to ensure the effectiveness of the programme.
- NOWPAP provides a solid institutional arrangement as an intergovernmental cooperation mechanism as part of the UNEP Regional Seas Programme; however, the situation of financial arrangement for maintaining and strengthening NOWPAP activities still need to be further improved.

#### **DSS-RETA**

- Focusing on monitoring and early warning, as well as root causes, DSS-RETA is promoting preventive efforts to address the DSS issue. Its influence is evident in the development and initiation of on-the-ground actions.
- DSS-RETA has achieved its stated objectives through the collaboration and participation of all major DSS-related stakeholders in Northeast Asia.
- DSS-RETA has made the best use of existing regional coordination mechanisms of international organisations. However, difficulties have arisen in follow-up activities, namely problems in raising significantly larger financial resources from relevant countries, localities and international funding organisations.
- Stakeholders, both relevant national governments and international organisations, are adequately involved in processes. Further participation by local stakeholders will be necessary for follow-up activities.
- As DSS issues are given high priority in ministerial level policy dialogue in the region, high level decision-making can be translated into the development of regional action plans and necessary on-the-ground activities. Securing financial resources for the step-by-step implementation of the Master Plan is one of the most urgent and important tasks for DSS-RETA.

The above performance assessment of the various ECMs, whether generic or issue-specific, indicates that most mechanisms have been found to have a certain level of relevance to the promotion of collective efforts in the region. In addition, most mechanisms have been found to perform their functions effectively, although there is a call for more efficiency in performance. There is a greater call for more outcomes from these mechanisms, those which concretely translate to projects in the region and wider participation from other stakeholders and sectors. Accordingly, current stakeholder participation can be further promoted, particularly regarding decision-making processes, with some sort of uncertainties on sustainability, with the exception of TEMM, the highest-level of cooperation mechanism involving China, Japan, and the ROK.

Following individual evaluation of six regional environmental cooperation mechanisms, an evaluation of the overall performance of environmental cooperation mechanisms in dealing with serious regional environmental issues was conducted.

Using certain criteria, the following characteristics were observed.

First, there were weak domestic implementation schemes, and comprehensive frameworks are lacking, for the existing ECMs, both generic and specific. In addition, it was observed that each mechanism has been operated separately, with different decision-making systems, as well as different secretariat systems.

Second, some of the emerging environmental issues, identified in this research as serious environmental problems requiring regional collaborative efforts for their solution, have not yet been addressed adequately. In addition, ECMs addressed at specific issues limit activities to monitoring and data collection, while linkage between scientific knowledge and policy-making processes can be further strengthened. Meanwhile, some overlapping of activities among different mechanisms was found.

Third, many regional environmental cooperation mechanisms lack the participation of the DPRK, or commitment from some participating countries. Meanwhile, it was found that China, Japan, and the Republic of Korea participate in most of the regional environmental cooperation mechanisms. The issue in question is the different participation of countries among different mechanisms.

Fourth, it was found that financial systems for most of the environmental cooperation mechanisms are operated unstably, or with an unbalanced contribution from one country. Then, it was reported that due to the lack of funding, the scale of activities is too limited to produce tangible outcomes.

Finally, for all existing ECMs, it was observed that participation of civil society organisations, private sectors, and local governments was limited, particularly with regard to decision-making processes. Further, it is apparent that more involvement of local governments, private sectors, and civil society organisations is necessary to produce tangible outcomes of activity implementation.

The aforementioned symptoms can be summarized as an overall lack of coordination among mechanisms, the result of which is a lack of synergy between activities and losses in effectiveness and efficiency of the mechanisms. Several reasons for these gaps and symptoms, which are key challenges to environmental cooperation in the NEA region, are pointed out as follows.

First of all, the region lacks a holistic regional framework regarding the vision and direction of environmental cooperation. Indeed, TEMM and NEASPEC could serve as authoritative and comprehensive mechanisms to provide guidance on regional environmental management, while promoting each individual mechanism and activity. However, no generic mechanism has been recognised by countries and relevant actors and stakeholders to hold such authority. Further, consensus on the necessity, role and



configuration of a comprehensive mechanism is yet to be built up among the region's countries. Accordingly, none of the generic mechanisms have addressed the issue of a strategic regional action plan for environmental management and protection, which would outline goals and basic principles for national policy guidance.

Second, the environmental cooperation system in this region has a relatively short history. Compared with some international and other regional environmental regimes, which have developed over approximately the last 40 years, environmental cooperation in the NEA region has evolved for less than 20 years.

Third, environmental cooperation mechanisms in other regions, e.g. the North American Agreement on Environmental Cooperation (NAAEC), were established on the basis of well-developed regional cooperation in other areas, including trade and security. Environmental cooperation mechanisms could proceed making use of principles, norms, rules and mutual trust already in place for other areas of regional cooperation. However, no regional regimes in trade or other areas exist among the six countries of the NEA region. It is not possible for ECMs in the NEA region to make use of economic incentives or trade measures to ensure enforcement and compliance.

Fourth, environmental cooperation in the NEA region lacks distinct leader nations. As a result, initiatives in specific areas of regional environmental cooperation arise from various countries and are weighted with equal importance, which results in difficulty reaching consensus.

Fifth, countries in the NEA region have different political stances influenced by historical bilateral relations. Remaining political tensions between countries affect the decision-making processes of environmental cooperation mechanisms. Indeed, historical and political disparities are reflected in the current weak consensus on identification of a clear regional scope and leading environmental issues.

Sixth, scientific evidence and assessment regarding the situation of regional environmental problems and relevant domestic environmental issues in specific countries, are still weak. Many research projects have been conducted jointly by academic institutions in the region, however results have yet to effectively influence the setting of political agenda to solve pressing environmental issues in the region.

Seventh, there are differing levels of commitment from participating countries for different ECMs. These disparities in commitment can be interpreted as "political competition" among countries. Competition in general terms implies some advantages in cost effectiveness as well as technology development, and so forth. Yet for the ECMs in this region, "political competition" has wielded negative influence, resulting in lack of coordination among ECMs, overlapping of activities, as well as slowing of progress for ECMs.

Finally, language barriers still exist. Specifically, since the scale of many environmental cooperation mechanisms is relatively small, meetings are often not facilitated with translation.

## **5. Recommendations on Future Regional Environmental Cooperation**

### **5.1. Recommendation for an Overall Environmental Cooperation System in the NEA Region**

#### **5.1.1. Develop Basic Goals and Principles**

These recommendations are presented to improve the function and performance of environmental cooperation mechanisms in the region. First of all, in order to develop necessary regional policy measures, a fundamental framework of cooperation is imperative. The first step is to develop goals and principles as basic guidelines for all parties and stakeholders involved, in order to share and follow the same vision. In other words, regional consensus is an important prerequisite for generic mechanisms. Only when consensus is comprehensive and solid will it be possible to carry out significant cooperation.

Two types of goals should be developed. The first type is environmental, goals which specify aims for environmental protection. Environmental goals should address overall concerns for environmental protection and socioeconomic development, as well as specific environmental issues in the region. The second type of goal should address institutional aspects of promotion of environmental cooperation in the NEA region.

The following are suggestions for developing principles to guide regional environmental cooperation:

- The environmental cooperation in the region should be promoted toward the mutual benefit of all countries and stakeholders.
- The environmental cooperation should explore the conjunct points of the various needs of different countries, to benefit all parties dealing with common environmental issues.
- All stakeholders should coordinate and participate in both policy-making and policy implementation dealing with environmental issues.
- Environmental cooperation mechanisms in the region should take a step-by-step approach, starting with small-scale agreeable action towards larger-scale policy implementation in the future.
- Environmental cooperation mechanisms in the region shall prioritise environmental issues and focus on specific areas to address the issues.

### **5.1.2. Design Coherent System of Environmental Cooperation**

A more coherent system of environmental cooperation is necessary to benefit from synergy among environmental cooperation mechanisms currently operated in the region. In this regard, in order to be effective, a generic environmental cooperation mechanism needs to perform two types of functions, namely, “external function” and “internal function”. External functions include (i) promotion of linkages with international institutions and other international environmental regimes to jointly address global issues; (ii) cooperation with similar mechanisms in other regions; and (iii) close coordination with other sectors, such as trade, industry, and energy. Likewise, internal functions include (i) setting of goals, principles and basic rules for the overall environmental cooperation mechanisms in the region; (ii) setting of agenda for building of a proper management system; (iii) prioritisation of the issues to be handled; (iv) coordination among specific mechanisms; (v) setting of framework for specific mechanisms to decide principles, rules, targets, and norms; (vi) development of action plan for implementation; (vii) financing for the operation of the mechanisms and implementation of the activities. (viii) capacity building and (ix) monitoring and evaluation of mechanisms to ensure efficient and smooth operation.

### **5.1.3. Key Factors for Improvement of Mechanisms**

Further, based on the analysis of this research, some key factors for the improvement of environmental cooperation mechanisms are presented. They are:

- Improved coordination (i) among existing mechanisms, (ii) among participating countries, (iii) with external international organisations, (iv) with existing global environmental regimes, (v) with environmental mechanisms in other regions, and (vi) with other sectors. Some specific ways to improve coordination include organisation of joint meetings, sharing of publications including action plans, establishment of working groups among different ministries of domestic governments on the same topic, representation of relevant organisations or regimes at meetings, organisation of activities in line with interests of international organisations, and so forth.
- Improvement in financial strength toward effective operation of environmental cooperation mechanisms. Apart from financial support from the governments of participating countries, the regional environmental cooperation system should consider diversification of funding sources, including funds from international organisations, as well as private corporations, and the like.
- Increased stakeholder participation, including corporations, civil society organisations and academia, from the planning stages of environmental cooperation mechanisms. The involvement of stakeholders in decision-making will facilitate the reflection of their opinions and ideas on policy formation, which will eventually lead to the smooth implementation of the mechanisms. In addition, sharing up-to-date knowledge among participating countries and among all stakeholders, both within the region and outside the region, is one of the

fundamental conditions for the successful operation of environmental cooperation mechanisms. In practice, the first step should be to organise meetings in a relatively open manner, rather than holding closed meetings for selected government officials. Subsequently, processes to incorporate social stakeholders, such as consensus-building through stakeholder participation in decision-making processes, should be considered.

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#### **5.1.4. Integrate Existing Generic Mechanisms**

Existing generic mechanisms need to be integrated. In this regard, NEAC could be a side event of TEMM, where it could continue to promote policy dialogue, specifically with the task of considering proposals submitted by working groups and submitting proposals to the ministerial meeting. Combination of NEASPEC and NEAC in a likewise manner is another option, which has already been discussed in actual NEASPEC and NEAC meetings. It would be more difficult to coordinate and harmonise TEMM and NEASPEC, although it is more necessary to do so. One possible way of coordination is joint meetings of the mechanisms.

#### **5.1.5. Establish an NEA Environment Fund**

The establishment of an NEA Environment Fund would help to improve the financial stability of environmental cooperation mechanisms. Set up by NEA region countries, this fund could gradually solve financial problems faced by mechanisms. It would provide financial resources for all environmental cooperation mechanisms in the NEA region in an integrated way.

### **5.2. Recommendations for TEMM**

In order for TEMM to function more efficiently as the leading mechanism to address overall environmental issues in the region, TEMM's current operational basis should be strengthened institutionally in the following regards:

- It should establishment of basic principles and objectives;
- It should continue the Ministerial Meeting as the decision-making body;
- It may consider on a secretariat in a future as one option<sup>1</sup>;
- It may consider to create a subsidiary body for proposal-making and implementation supervision;
- It may consider to establish of a financial mechanism, such as the NEA Environmental Fund<sup>2</sup>;
- It should strengthen project implementation through selection of project implementation bodies and supervision; and
- It may consider to enlarge the geographical coverage of the mechanism when necessary.

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<sup>1</sup> Suggestion originally made by PRCEE and KEI

<sup>2</sup> Suggestion originally made by KEI

Regarding future cooperation areas, TEMM should be entitled to deal with any regional environmental issue in Northeast Asia. Several new issues have emerged in the region, including e-wastes, chemical issues, and others. As these issues gradually gain the attention of relevant countries, especially TEMM member states, relevant projects or cooperation mechanisms should be established to address them.

In order to strengthen the effectiveness of TEMM, the following activities may be considered as new options:

- Publication of the NEA Environmental Outlook, to assess the current state of the environment in a comprehensive way, in terms of scientific basis, status quo, as well as future trends<sup>3</sup>.
- Development of an Action Plan, in order to facilitate the smooth operation of environmental cooperation mechanisms in the region.
- Organisation of a “NEA Environment Week” to promote regional environmental cooperation at a practical level. An intensive period of activities may be useful to strengthen networking and cooperation among countries and relevant organisations, donor agencies, and stakeholders in the NEA region<sup>4</sup>.

## **6. Conclusion**

### ***Learn from the Past, Build the Future***

This joint research project was conducted by three institutes in China, Japan, and the Republic of Korea, reflecting the emerging needs of the ever closer regional cooperation activities in Northeast Asia. Several key points have been identified revealing the need to further strengthen the environmental cooperation system in the region. Key points have been made from both the perspective of the environmental issues themselves, as well as the existing environmental cooperation mechanisms in the region. Based on these key points, this report further elaborates on necessary actions to be taken, making recommendations for future regional environmental cooperation in Northeast Asia.

Through increasing the presence of TEMM, there is high potential for the field of environmental cooperation in the region. The environmental cooperation system could possibly lead to a breakthrough in strengthening relationships among nations in the region. The environmental management system in Northeast Asia is on the verge of change towards closer cooperation. It is hoped that this joint research will be effectively utilised as a reference to further improve the performance of the environmental cooperation system in the region.

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<sup>3</sup> Suggestion originally made by IGES

<sup>4</sup> Suggestion originally made by IGES