

LIMITED

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UNITED NATIONS ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND  
THE PACIFIC

Subregional Workshop on Action Plan for Improvement of Particulate Abatement  
Systems of Coal-Fired Power Plants in North-East Asia

7-8 June 2004,

Beijing

China

**Conclusions and Recommendations**

1. Coal will continue to be a major energy resource in the North-East Asian subregion to support economic development in the short and medium term. However, emissions from the continued utilization of coal at the coal-fired power plants in the subregion will greatly affect the lives of people and the society with economic implications.
2. While the current Subregional workshop is the last activity within framework of the *Regional Technical Assistance for Transboundary Environmental Cooperation in North-East Asia* funded by the Asian Development Bank, experts agreed that abatement of particulate matters was too restrictive and suggested to widen the scope to include as a short term the SO<sub>x</sub> and NO<sub>x</sub> emissions, and longer term and with the advancement of the technologies a range of heavy metals.
3. Within the framework of the project, China and Mongolia have developed action plans to reduce emissions from selected coal-fired power plants in their country. Each action plan was developed based on technical audits and assessments of the necessary technological and policy measures to be undertaken to improve the performance of the particulate abatement systems. The action plan was reviewed at the national and subregional level by the experts and useful recommendations were made for further improvements. It was recommended that the action plans are submitted to the Governmental Agencies responsible for the sector for approval and for eventual financial

support from national and international sources, including from Asian Development Bank and other sources.

4. Experts attending the meeting agreed that setting up national standards on emissions from coal-fired power plants is critical in developing any projects to reduce emissions. Some countries such as China, Russian Federation and the Republic of Korea have set up such standards. The meeting agreed to promote establishing similar standards based on the best practices in the subregion.
5. It was recommended that further analysis on the implications of emissions from coal-fired power plants at the subregional level was needed in order for the governments to develop policy recommendations and to be formulated as a subregional action plan. Elements of importance to be tackled in subregional action plan have been further elaborated below:

A. Emission standards

- Republic of Korea is currently using TMS monitoring system and has enough capacity and experience to share with the rest of the countries in NEA subregion on emission monitoring and on development of emission standards, policies and legislations/regulations. China has set up standards of CEMS in 2001;
- The Russia Federation and China have the same experience and capacity available as the Republic of Korea;
- NEASPEC member countries will benefit from information and experience sharing on emission monitoring, emission standards, policies, and legislation;
- Information and experience exchange among the NEASPEC countries will improve air quality and long range transport of air pollution at the subregional and regional levels.

B. Research and development activities

- Exchange of information on emissions monitoring and analysis;
- There is a need to use the best available technology to decrease the emission from the coal-fired power plants;
- Multi-treatment research of air pollutants addressing combined emissions on subregional level is needed.

C. Heavy metal

- The programme needs to initiate studies on heavy metals especially on mercury, one of the long range transport pollutants;
- Collecting data on heavy metals (Hg) in coal and in emission to calculate the emission factor are important initial activities.

D. Capacity building

- On-the-job training, training on emission monitoring, training of trainers, and training of maintenance and operation of particulate abatement systems to improve the air quality and the efficiency of the operation of power plants are the proposed range of capacity building activities in the NEA subregion.

E. Stakeholder involvement

- Economic incentives and policy strengthening for the emission reduction are recommended methods to enhance stakeholder involvement;
  - In developing projects to reduce emission from coal-fired power plants, it is necessary to hold consultation with concerned government agencies and other stakeholders as necessary;
  - Consultation process through local media using questionnaire and other means should be developed for the projects
6. After final review according to the recommendation from the Subregional workshop, the draft action plans developed for selected coal-fired power plants in China and Mongolia will be submitted to ADB as part of the Terminal Report of the TA Assistance Project on 6 July 2004 with recommendation to consider funding for their implementation. The APs will also be submitted as part of the report and recommendations from the Subregional workshop to the NEASPEC Focal Points of the two countries and to the SOM 10 to be held in Japan at the end of 2004.
7. It was also agreed that participation of all countries from the subregion is essential in learning from the experiences from other countries to promote subregional cooperation. In this connection, the secretariat was requested to explore the opportunity to further the endeavour and support the participation of all NEASPEC member countries including identifying supplementary funds and the use of the core fund to ensure participation.