

North-East Asian Subregional Programme for Environmental Cooperation (NEASPEC)

Mitigating Transboundary Air Pollution in North-East Asia

A challenge that requires subregional cooperation



Satellite-derived map of PM 2.5 averaged over 2001-2006

0	5	10	15	20	50	80
	Map source:	NASA (http://w	ww.nasa.gov/t	opics/earth/feat	ures/health-sapr	oina html)

Transboundary air pollution (TAP) has been recognized as one of the most serious environmental challenges in North-East Asia (NEA) due to a range of factors such as geographical proximity of member countries, increasing energy consumption, and lack of technology as well as inadequacy of comprehensive regional framework in addressing the problem.

Having recognized the consequences of air pollution, the subregion has acted on the issue at national and local levels. There has been considerable progress in reducing some air pollutants, for example, China reduced SO_2 emissions from electric power generation by 31.4% from 2005 to 2010.

Aside from SO₂ emissions, however, North-East Asia also faces challenges of other air pollutants including fine particulate matter ($PM_{2.5}$) and volatile organic compounds (VOCs). Moreover, many NEA cities have recently experienced sharp peaks of extremely high level of air pollution, especially, fine particulate matter ($PM_{2.5}$) in relatively short periods of time due to the combination of increasing emissions of pollutants and unfavorable weather conditions. It has become evident that air pollution directly contributes to huge economic and health burden.



All NEA countries are sources as well as receptors of TAP. A holistic and systematic approach is needed to bring NEA countries to work closely with each other, and to provide the basis of sustained commitment on subregional cooperation. The NEASPEC TAP project in 2014 and 2015 therefore works on creating a subregional framework that addresses both science and policy aspects of TAP.



NEASPEC has acted on the evolving needs in mitigating TAP overtime:

1996 - 2012	2011 - 2012	2014 - 2015	
Mitigation of Transboundary Air Pollution from Coal-fired Power plants	Review of Addressing Environmental	Development of the Technical and Policy Frameworks for Transboundary	

Mitigation of Transboundary Air Pollution from Coal-fired Power plants in North-East Asia

The project was implemented with ADB to increase technical capacity of coal-fired power plants in China and Mongolia to reduce SO₂ emissions and provided training including:

- Emissions standards
- Emissions control
- Emissions monitoring

Review of Addressing Environmental Impact of Transboundary Air Pollution in North-East Asia

It is a comprehensive review which showed strong potential for further improvement of national and subregional capacity on technical and policy levels, and recognized the various aspects of monitoring and assessment under the existing regional and multilateral mechanisms. It also noted the lack of subregional frameworks that provide holistic approach covering all components of transboundary air pollution management, including science-to-policy mechanisms in North-East Asia.

Development of the Technical and Policy Frameworks for Transboundary Air Pollution Assessment and Abatement in North-East Asia

To follow-up on the review carried out in 2012, it is essential to assess ways of establishing a holistic science-based and policy-supported framework that would cover all components of transboundary air pollution management. This Project aims to enhance cooperation on assessment and mitigation of transboundary air pollution in the subregion through the promotion of common methodologies and establishment of a framework which would function on a continual basis.

NEASPEC was launched in 1993 as a comprehensive intergovernmental cooperation mechanism comprising all six North-East Asian countries, namely, China, Democratic People's Republic of Korea, Japan, Mongolia, Republic of Korea, and the Russian Federation.

UNESCAP-ENEA Office functions as the Secretariat.

Senior Officials Meeting (SOM) is held annually as the governing body and principal vehicle for the evolution of NEASPEC.



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