



Estimation of emissions of air pollutants from coal-fired power plants in North Korea

Min Ju Yeo (1) and Yong Pyo Kim (2)

(1) Ewha Womans University, Department of Environmental Science and Engineering, Seoul, Korea, Republic Of (iamdasom@empas.com), (2) Ewha Womans University, Department of Chemical Engineering and Materials Science, Seoul, Korea, Republic Of (yong@ewha.ac.kr)

Recently, concerns about the environmental problems in North Korea (NK) have been growing. NK was the first ranked country in mortality rate attributed to household and ambient air pollution in 2012 according to the World Health Organization (WHO) (2017). Coal-fired power plants might be one of the most important emission sources of outdoor air pollution in NK according to the Ministry of Land and Environment Protection, NK (2012). Thus, to understand the air quality in NK, understanding the air pollutants' emissions from coal-fired power plants in NK is needed. However, the status of air quality in NK has not been well understood by outside. Especially, the data reported by the North Korean government have been limited, irregular, and quantitatively deficient. In this study, we estimated emissions of air pollutants such as sulfur dioxide, nitrogen dioxide, and carbon monoxide using the facility specific energy use data produced by NK and discussed the status of air quality in NK.