

PROJECT INFORMATION

Further development of air quality control planning and air quality monitoring in Ulaanbaatar (Mongolia)



Smog over the ger-districts in
Mongolia's capital city
Ulaanbaatar

Source: G. Baumbach

Background

In Mongolian cities considerable air pollution occurs, especially in winter. Most of the air pollution is caused in Ger settlements with yurts (Mongolian: Ger) and small huts in which individual stoves are primarily fired with raw coal and wood. Despite switching to briquettes in the capital Ulaanbaatar Ger inhabitants suffer in particular during situations with poor atmospheric exchange conditions under extreme particulate matter pollution. Therefore, the Ministry of Environment and Tourism of Mongolia asked for advice on further development of clean air planning and monitoring of air quality in Ulaanbaatar.

Project details

UBA in cooperation with the "National Agency for Meteorology and Environmental Monitoring" (NAMEM) developed a project aiming to advance the efforts of improving air quality particularly with regard to a reduction of the particulate matter concentration during wintertime in Ulaanbaatar. For that purpose, staff members of Mongolian administrations and institutions on national and municipal level were advised to enhance the analysis of the data sets of the existing air monitoring network. In this context proposals were developed to improve the monitoring strategy. Additionally, a modeling approach was developed in order to allow the Mongolian experts to estimate the source apportionment of airborne concentrations as well as the influence of meteorology and orography (description of the earth's surface relief) on the pollutant dispersion. The Mongolian Experts were trained to derive and prioritize integrated measures for clean air planning and urban development. All findings were summarized as written recommendations for the further development of clean air planning and air quality monitoring and in a final workshop discussed by German and Mongolian experts.

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Target country: Mongolia

Duration: 09/2017 – 11/2019

Beneficiaries: Ministry of Environment and Tourism of Mongolia, Governmental Implementing Agency for Meteorology and Environmental Monitoring

Implementing organisation:

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