

**URBAN AIR QUALITY PROJECTION FOR THE CITIES OF BELARUS****S.V. Kakareka***Institute for Problems of Natural Resources Use & Ecology, Minsk, Belarus*

In the paper methodology, input data and some results on air quality projection for the cities of Belarus till 2020 are discussed. This work was done as a task within integrated environmental assessment project. In spite of the fact that air quality in cities of Belarus was improved in last decade, air pollution issues remains among key problems of urban environment. Since air emissions have been reduced mainly due to economic decrease, expected economic growth can lead to increase of air pollution. Therefore air quality projection based on modeling approaches is important for adequacy of measures on air emission reduction assessment. Available methodological data on urban air modeling was analysed (achievements within Auto-Oil-II and ShAir programmes, City-Delta project etc.). The following species were projected: TSP, SO<sub>2</sub>, NO<sub>2</sub> and CO as criteria pollutants in ambient air of cities of Belarus. As indicators values of yearly averaged concentrations were projected. Background and local conditions were taken into account. Modeled urban concentrations for 13 cities were calculated with year temporal resolution. Methodological features of the projection: background concentrations were calculated on the basis of IIASA emission projection scenarios and EMEP Unified Eulerian model calculations for 2000; local concentrations were projected using regression model of relations between emissions within the certain city and averaged concentrations of pollutants. On the basis of yearly averaged concentrations levels of Maximum Permissible Levels exceeding for every year were calculated. Two scenarios of economic development and abatement measures were considered; which differ in level of expected air pollution.