

## Emissions and atmospheric chemistry from Havana´ stationary sources

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The determination quantitative of air pollutant emission and dispersion in the atmosphere from main stationary sources in Havana and its effects on atmospheric chemistry, is an urgent and necessary study, taking into the account that mentioned city have the most population of country and a number considerable of emission sources. The knowledge of these emissions and dispersion is a useful tool to know the characteristic the atmospheric chemistry in urbanization.

The results showed atmospheric emissions rate of SO<sub>2</sub> is upper than 29 thousand ton/year while NO<sub>2</sub> emission rate is about 12 300 ton/year. Furthermore, particulate matter (PM<sub>10</sub> and PM<sub>2,5</sub>) reach 3 700 ton/year, which are known for its potential damage for human health and atmospheric chemistry. The most populated municipalities are very close to the fixed sources emit more pollutants into the atmosphere. The influence of urbanization is reflected in the dispersion of emissions pollutants. Finally, this air emission inventory is a previous stage before of that will be allow future implementation of air quality forecasting for Havana city from any air pollution models outputs.

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