Air Pollution in Adjara Region (Georgia)

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Abstract:

The monitoring of basic pollutants (sulphur oxides, nitrogen oxides, carbon monoxide, oxidants, hydrocarbons and particulate matter) to determine the air quality of a certain area is described. We analyzed Batumi Air Pollution. In Batumi Air dust and nitrogen oxides is erase 3 times, carbon oxide and sulfur dioxide are in the norm, because in Batumi auto transports are old then 10 years and there are a lot of new buildings. Also we check ecological status of the organization, for example LTD "Batumi sea port terminal", LTD "zimo-7", LTD "routs". All of them make emission according to standard

Key Terms: Adjara, Air pollution, emission

Introduction:

Air, is the most essential element for all living organisms and yet, most humans play a big role on polluting this essential resource. Air pollution may not be as dangerous in its direct outcome as nuclear or water pollution can be, but in the long term it will have a tremendous effect on the environment and health of its organisms living in. Asthma, cancer, acid rain, and the disability to photosynthesize are only a few causes of air pollution. The atmospheric pollutants with the greatest effect onto the environment are the carbon monoxide, carbon dioxide, hydrocarbons, sulfur dioxide, nitrogen oxides, dust particles, radioactive isotopes, and chloro fluorocarbons. The major sources that enable carbon monoxide to enter the atmosphere are the exhausts of cars, the burning of fossil fuels, and the oxidation of natural methane Carbon dioxide is caused by the consumption of fossil fuels only and it causes the possible greenhouse effect which has global warming as an outcome. Hydrocarbons are caused by the combustion of oil and petrol and it effects the environment with carcinogen. Carcinogen is a chemical agent that causes cancer. Sulphur dioxide is certainly one of the major atmospheric pollutants considered that it causes stinging eyes, lung damage, asthma, and acid rain. It is the result of coal fired power stations. Nitrogen oxides that is produced by the exhaust of cars, causes pneumonia and asphyxia. The outcome of the well known dust particles is often underestimated. It is caused by industrial chimneys, car exhaust, and volcanic eruption sand it effects the environment by toxic effects and damage of the lungs. Radioactive isotopes which are caused by small quantities from nuclear waste and nuclear accidents have a carcinogenic effect on the environment as well. The outcome of chlorofluorocarbons, which had been first discovered in the 80s is that it destroys the ozone layer. Many of those major atmospheric pollutants combined produce the dangerous and well known smoke and gas emission called smog.

Materials and Methods:

The monitoring of basic pollutants (sulphur oxides, nitrogen oxides, carbon monoxide, oxidants, hydrocarbons and particulate matter) to determine the air quality of a certain area is described.

Indoor air quality (IAQ) is a term which refers to the air quality within and around buildings and structures, especially as it relates to the health and comfort of building occupants. Source control, filtration and the use of ventilation to dilute contaminants are the primary methods for improving indoor air quality in most buildings. Emissions of hazardous substances from materials and products and their immissions effect the natural environment, human health and safety and sensitive materials. We focus on the identification and analysis of such
pollutants, their emission levels from materials and their environmental impact and damage mechanism. A reduction of emissions from materials and products is a relevant contribution for improving indoor air quality.

Results and Discussion:

We analyzed Batumi Air Pollution. In Batumi Air dust and nitrogen oxides is erase 3 times, carbon oxide and sulfur dioxide are in the norm, because in Batumi auto transports are old then 10 years and there are a lot of new buildings. Also we check ecological status of the organization, for example LTD “Batumi sea port terminal”, LTD “zimo-7”, LTD “routs”. All of them make emission according to standard.