

Damaging effects of air pollution, and practices for smog-situations in European cities

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Air pollution has both global and local effects. Harmful substances have been emitted continuously, which are crossing borders by the wind. As a result it is necessary to enhance international cooperation, in order to improve the quality of air.

Air pollution has short and long term health damaging effects. As short term effects there are coughing and difficult breathing, because of the flue-dust. The long term effects of flue-dust content in the outdoor air are the following: significant reduction of life expectancy, increasing of mortality because of heart, circulatory and respiratory diseases as well as lung cancer. The grew concentration of flue-dust has extended the number of patients – suffering from circulatory and respiratory illnesses – in hospitals.

Global damaging effect of air pollution contains for example the intensive greenhouse-effect and the expansion of the ozone-hole as well. The mostly known local effects are smog and acid rains, which affect people living in urban areas. Air pollution has been threatening our health as well as can cause economic damages.

Air pollution has overstepped the allowable concentration in many cities, so there were unavoidable to order a smog alert. The word „smog” comes from two English words: smoke and fog. This word had been invented by a physicist, Harold Dex Voeux about 1911. There are two types of smog:

The London-typed smog can caused by air pollution descending from charocal-burning, or sulfur-dioxide and dust emission. This kind of pollution combining with fog can result floating sulfuric-acid drops in the air.

The Los Angeles-typed smog (photochemistrial smog) appears on sunny days besides in intensive traffic. Nitrogen-oxides and hydrocarbons step into reaction with each other in presence of sunshine, and create harmful gas and aerosol mixtures.

The above mentioned substances are annoying the eyes and harming the respiratory system. They have effects on plants as well. This kind of smog is frequent in big cities.

Every polluter has a stated concentration limit, which is banned to exceed. Otherwise the pollution can be deteriorative and dangerous both for health and life. The atmospheric limits and alarm threshold values of the European Union had been accepted in the directive called 96/62/EC on 27th September 1996.

There are methodical limit exceedings in big European cities (for example: Berlin, Frankfurt, Brussels, Vienna and Budapest). These countries have initiated various measures in the interest of decreasing air pollution (for example: transformation of population heating, traffic limitation, the development of community traffic,

preferring pedestrian and cycling traffic, establishing traffic zones etc.). Budapest Capital has created its own smog alert decree as well.

Keywords: Air pollution, health, smog, European cities, green house effect