

## AIR POLLUTION PROBLEM IN ISTANBUL, TURKEY AND STRATEGICAL EFFORTS IN AIR QUALITY MANAGEMENT

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Istanbul is one of the world's largest metropolitan areas, containing nearly 13 million inhabitants. The city (41°N, 29°E) is located on both continents, Asia and Europe. The Bosphorous Strait lies between the European and Asian sides of the city. Istanbul is the cultural, economical and financial center of Turkey. Pollution sources are domestic heating, traffic and industry in the city. There are about 1.7 million registered cars. Recently, motor vehicles are the major source of a number of air pollutants, like CO, NO<sub>x</sub>, HCs, lead and VOCs depending on increasing number of car. The air quality of Istanbul has been a major concern since the early 1980s. The city has experienced severe air pollution problems in 1980s. SO<sub>2</sub> concentrations, first time, exceeded 3000 µg/m<sup>3</sup> on 18th January, 2001 under stagnant air conditions. Usage of poor quality lignite was banned in late 1993. The fuel switching from coal to the natural gas has gradually improved the air quality. Today, SO<sub>2</sub> and TSP levels are below the national air quality standards. However, a new air pollution type has appeared in the city that is the "photochemical pollution". Surface ozone concentration is increasing in the city depending on increasing number of cars that use mostly gasoline and poor dispersion conditions. This paper will give an overview on the air pollution history of Istanbul and how this pollution problem has been tackled throughout years by applying various strategies. The difference between the air quality of Istanbul today and ten years ago will be highlighted.