

O 131. COMPARATIVE INVESTIGATION OF TRAFFIC EMISSION RATES IN KONYA

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ABSTRACT: The increase in the population of the world brings the significant challenges of protection our environment and atmosphere from being polluted. As the economic growth and urban development of any city depends on transportation it's necessary to understand their negative impacts and their changing rates as well in order to optimize our traffic network planning. This study aims to investigate the air pollutants including NO_x, PM and CO caused by motor vehicles in Konya province. The annual average daily traffic of the motor vehicles on Turkish state highways inside Konya borders considering their types and fuel were used for calculation the annual emission rates of the pollutants between 2010 and 2017. The emission values of each year comparatively evaluated and the effects of personal cars in total were identified. As a result, we found that the total taken pathways length increased by 67.8 % in 2017 according to 2010. Therefore, the increase in the amount of NO_x, CO and PM found as 18.2 %, 66.7% and 32.1% respectively in 2017 according to 2010. Lastly the length of the pathways traveled by personal cars was made %64.18 of the total in 2010 and increases to 68.14% in 2017. We understood from study that most significant vehicles with respect to the contribution in air pollutions are ranked as personal cars and then motor vehicles using diesel fuels. While the vehicles using LPG has a lower effect.

Keywords: Air Pollution, Traffic Emissions, Pollutant Emissions, Konya