

Study of Electric Buses and Their Impact on The Environment in Urban Networks

## محل انتشار:

ينجمين كنفرانس بين المللي مهندسي محيط زيست و منابع طبيعي (سال: 1398)

تعداد صفحات اصل مقاله: 14

## نویسندگان:

SeyedMostafa JafarzadehFadaki - Master of Science in Transportation Engineering Islamic Azad University, Science and Research Branch, Daneshgah Blvd, Simon Bulivar Blvd, Tehran, Iran

Mohammad Hosein Abbasi - PhD Student in Transportation Engineering Faculty of Civil and Environmental Engineering, Tarbiat Modares University, Tehran, Iran

SeyyedReza Esmaeilzadeh - Master of Science Student in Transportation Engineering Faculty of Civil and Environmental Engineering, Tarbiat Modares University, Tehran, Iran

## خلاصه مقاله:

Air Pollution, along with its harmful impacts on public health, the economy, and the environment, is a major urban problem in metropolises. The high consumption of fossil fuels, resulting in rising oil prices, greenhouse gas emissions and global warming which have encouraged metropolises to use modern technologies in the urban transport sector. In this paper, using the documentary and analytical method and have evaluated electric bus types and their effects on the environment. Studies have shown that electric vehicles have a high degree of environmental compatibility and could be a good alternative to diesel vehicles for reducing environmental pollutants. In this regard, the amount of pollutant emission reductions varies according to the source of electricity, for example in solar source the reduction is about 80-90%, in natural gas is 25-50% and coal is 10%. Measuring the noise pollution levels of electric and diesel buses in the fixed speed range of urban environments showed a reduction about 5-9 dB in logarithmic scale. In .addition, lifecycle (12 years) cost of electric buses is about 12.5% less than the cost of a diesel bus

## كلمات كليدى:

.Air Pollution, Sustainable Public Transportation, Electric bus, Lifecycle Cost, Noise Pollution

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