

VEHICLE AND HUMAN ENVIRONMENT

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Abstract

With the invention of motorized vehicles in the late 19th century, men were provided with means to quickly and easily get to desired destination at any time. The vehicle was one of the inventions that have greatly contributed to the high standards of modern people and has become an inseparable part of modern society and of the economic system. Over 800 million passenger vehicles worldwide, over 99% of them driven by IC engines, are compelling evidence of need and desire for the vehicle.

Each year, about 70 million vehicles are produced the world .

This mass motorization has become a problem, because motorized traffic has become an important source of various burdens on the environment. It is one of the largest consumers of energy and a major source of unwanted exhaust emissions.

During the last decades, knowledge has been crystallized that the impact of vehicles on environment can be divided into:

Local impact: mainly in populated areas - emissions of carbon monoxide (CO), unburned hydrocarbons (HC), nitrogen oxides (NO_x), particulate matter (soot, PM), noise and the like.

Regional impact: like "acid rains", "ozone smog", "dying forests", as well as the growing waste landfills and pollution of water and soil.

Global impact: usually registered in discussions on climate change, global warming, "ozone hole" and excessive exploitation of natural resources of energy, raw materials and food.

Key words: vehicle, environment, exhaust emissions.

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Svi parametri danas ukazuju, da će automobil zadržati svoj primat kao sredstvo saobraćaja i u doglednoj budućnosti. Zamena za njega još nije pronadjena. Naravno, da će i dalje morati da ispunjava sve zahteve koje pred njega postavlja sve veća gustina saobraćaja, posebno u velikim gradovima, sa svim problemima u vezi sa potrošnjom energije i ugrožavanjem okoline.

Pitanje pogonskog agregata za vozila naći će odgovor pre svega u ponudi energije na tržištu. Prognoze o količini postojećih rezervi nafte stalno se, decenijama, ne menjaju. I danas se, kao i pre pola veka, tvrdi da će one da traju još 30 do 40 godina. Ali, bez obzira na to kolike su rezerve, zna se da su one ograničene i zato je traženje drugih goriva stalni pratilac razvoja u

