Natural gas is the most economical and environmental friendly fuel for motor vehi...



Thesis: Natural gas is the most economical and environmental friendly fuel for motor vehicles Introduction The utilization of conventional fuel in motor vehicles is the main cause of air pollution. The emission of certain gases by the utilization of such fuels results in green house effect that can prove to be hazardous to the environment. Hence, an alternative to reduce air pollution is to develop other kinds of fuels. There are various researches done in this field and several other types of fuel such as electric fuel, natural gas, hydrogen, fuel cell etc are in the development stages. However, these fuel have to be feasible for utilization. Of the various types of alternative fuels, natural gas is the most economical and reduces air pollution.

Analysis

The most common types of alternative fuels considered for motor vehicles are electric fuel, natural gas, hydrogen and fuel cell. Each of these fuels has its own advantages and the disadvantages. The best alternative fuel will be the one that is economical and reduces air pollution. There are various types of motor vehicles depending on the kind of fuel utilized in it such as electric vehicles, hydrogen fuel vehicles, fuel cell vehicles and natural gas fuel vehicles

An electric fuel vehicle has the capacity of not producing any pollutants and even if they do, it is easier to control it. However, the cost associated with it is very high. Since the vehicle operates on electricity, the refuel time is high and refueling is not possible in case of power interruption. Such vehicles have lower performance than other types of vehicles. [Alternative vehicles, n. d]

Hydrogen is one of the most abundant gases in the atmosphere. The utilization of this gas in the motor vehicles does not produce any green https://assignbuster.com/natural-gas-is-the-most-economical-and-environmental-friendly-fuel-for-motor-vehicles/

house gases however, it produces small amount of Nitrogen oxide. One of the major hazards of utilizing hydrogen as fuel is that it is hazardous in nature and is difficult to store in vehicles. It also has limited refueling structure. . [Alternative vehicles, n. d]

Fuel cell produces electricity by the chemical reaction between certain gases such as hydrogen, methane, oxygen etc. The utilization of fuel cells in the motor vehicles does not produce any pollutants and such vehicles are highly efficient. The maintenance of fuel cells vehicle is simple. The production, transportation, distribution and storage of hydrogen required to produce fuel cell is a cumbersome process. There are chances that production of hydrocarbons may occur during the formation of hydrogen. This can prove to be hazardous to the atmosphere. Another major drawback of fuel cell is that its units are hand made and requires some expensive materials in producing fuel cell. Due to this fuel cells are not economical. [Fuel cell today, n. d] Replacement of conventional fuels with natural gas is the most economical and effective method of reducing air pollution. Natural gas is easily accessible and does not involve any expensive process to obtain it. Since it is naturally obtained in a ready to use state, natural gas is very economical. [Ayala, n. d]. Natural gas produces lesser amount of pollutants through a better and a cleaner combustion process than any of the conventional fuels. Hence, it reduces the hazards of environmental pollution. [Ayala, n. d]. The major drawback of this fuel is that it produces Carbon mono oxide, which is one of the worst contaminants. However this pollutant is produced in less amount. Natural gas fuel is most economical than any of the alternative fuels. Therefore, it is the best alternative fuels that can be utilized in motor vehicles.

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Conclusion

Air pollution caused due to the utilization of conventional fuel is a cause of concern due to various environmental hazards associated with it.

Considering the cost and air pollution associated with fuel, natural gas is the best type of alternative fuel.

References

- 1. Orlando Ayala, n. d, " Natural gas and Gasoline-Advantages and disadvantages" retrieved on 7th Sept 2005 from http://www. udel. edu/eli/essays orlando. html
- 2. Alternative fuels, n. d, retrieved on 7th Sept 2005 from http://www. upei. ca/physics/p261/projects/transportation1/webpage10A. htm
- 3. Fuel Cell Today, n. d, "Opening doors to fuel cell commercialization-Advantages- disadvantages Fuel cell today- Education kit 10", retrieved on 7th Sept 2005 from http://66. 102. 7. 104/searchq= cache: Z2eA76k-7y8J: www. fuelcelltoday.

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