**ABSTRACT**

Around 2.5 billion vehicles roamed the world’s streets and highways in 2015, almost 80%of them passenger cars, the rest truck and buses. The number probably will reach 4 billion before 2020.Thus, road traffic depends almost entirely on vehicles powered by fossil fuels.In the next 200years, mankind would have used up the world’s fossil fuel resource that took 600 million years to be created. The pollution that comes with this fossil energy consumption is recognized around the world. Local air quality and its influence on public health, acidification and the greenhouse effect have become permanent areas of attention for decision makers. So, it is time to seriously search for an alternative fuel which overcomes the problems of pollution and price rise.

The major alternative fuels are Bio-fuels, Hydrogen and Electricity. Bio fuels are not a suitable option as they have lot of technical challenges including quality, and also it leads to deforestation. World’s major electricity production is based on fossil fuel sources therefore Electric vehicles are also not the solution. The only reliable solution is the Hydrogen Fuel which is renewable, readily available and environmental friendly. In near future vehicles are going to be powered by either Hydrogen Internal Combustion Engines or Hydrogen Fuel Cell Vehicles.Review is made of the positive features and the current limitations associated with the use of hydrogen as a spark ignitionengine fuel.It is shown that hydrogen has excellent prospects to achieve very satisfactory performance in engine applicationsthat may be superior in many aspects to those with conventional fuels. The researchers who are working on sustainable energy solutions have proved that Hydrogen Fuel Cell Electric Vehicles are very economical, cleaner and have high efficiency.Major automobile companies have started manufacturing Hydrogen FCEV. Many nations are working on Hydrogen Infrastructure. Thus Hydrogen is going to be the fuel of future.