

## Verifying the Effectiveness of Hydrogen Fuel Technology and the Study in Gaining Competitive Advantage – The Case of Hydrogen Fuel Industries Sdn Bhd

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## **ABSTRACT**

The world was badly affected on the recent 2008 oil crisis when the price of oil shot up for the first time to USD140 per barrel. It has led to a price increase in many sectors including constructions, transportations, food industry and many more. With the volatility of the current petrol price, the world understands that it is unsecure to depend solely on oil as a source of energy. The need for an alternative fuel technology has never seemed more welcoming than now.

Hydrogen Fuel Industries (HFI) Sdn Bhd had taken a brave step in introducing and commercializing hydrogen fuel technology in Malaysia. This is one of the few alternative-fuel technologies that have been studied in the world today. Unfortunately, many still question the invention and are still not convinced in the technology. This study had tried to reveal the efficiency of the product by taking 30 taxis that had been installed with hydrogen fuel system and comparing their fuel consumption before and after the installation. The researchers had also extended the research to see the effect of mode of driving, mileage of the car and the year the car was manufactured on the performance of the taxis with respect to fuel consumptions. All the data are secondary data gathered from the company's file but primary data are obtained for verification through interviews of the taxi drivers. The analysis was carried out through descriptive statistics and other statistical tests. Later, the thesis had elaborated on the company's current standings through SWOT analysis where after that the researchers had come up with a series of recommended actions put in three stages.