

## **The Economic Role of Alternative Fuels in The Development of Clean Wheeled Transport in Terms of Decarbonisation\***

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### **Abstract**

Transportation, which uses significant amounts of traditional fuels, is now turning to the development of other alternative energy sources, thus moving away from oil. There is a noticeable move towards sustainable development in terms of energy procurement and its efficient use. This is related not only to economics, but also to the awareness of the harmful effects of old solutions on the environment. New technologies that have been developed for more than a dozen years are aimed at a complete shift away from hydrocarbon energy sources in transportation in the broad sense and replacing it with other alternative fuels. The article presents a meta-analysis of available and currently used alternative fuels. Fuels such as natural gas and hydrogen are presented. Hybrid drive solutions as well as the advantages and disadvantages of electric drives are described. The sources of information that were used in the analysis were scientific articles, statistical data and government data. The article classifies alternative fuels in global terms, trends and predictions for this sector of the economy. Aspects of safety, cost, quality and functionality of already introduced solutions are also presented, as well as important issues related to obtaining a final product that would keep the balance between the economic aspects involved and the environmental requirements currently in place.

**Keywords:** quality, management, alternative fuels, automotive industry, sustainable development, environmental protection