

# THE PROMOTING THE ELECTRIC VEHICLE INDUSTRY WITH BATTERIES

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## ABSTRACT

The objective of this research is to study The promoting the electric vehicle industry with batteries. It was found that the automotive industry is classified as an early industry that is important for the development of the country in terms of economy, employment, creating added value, developments in automotive technology. As well as the development of other supporting industries and businesses involved in the supply chain of the industry, Thailand has a policy to develop this industry continuously. Entrepreneurs should have a deming cycle that consists of PDCA (planning, doing, checking activities, checking performance), and action. Summary of performance and continuous improvement to enhance the capability of the Thai automotive industry. By establishing appropriate policies at each point in time. The preparation of the automotive industry master plan by government agencies and the private sector is an important driving force that supports the sustainable growth of the Thai automotive industry. In addition, the direction of the automotive business, both in terms of supply and demand, has changed due to the shift of the global economic hub from west to east, making Asia even more important in terms of both marketing and being a major automotive manufacturing base in the world.

**Keywords :** The promoting / the electric vehicle industry / batteries

## INTRODUCTION

The global automotive industry is transcending a major transformation. Electrification, autonomous driving, and revivification in the mobility sector are affecting industries such as automakers, automakers, and more. parts manufacturer, retailer or dealer, Service stations, including related players such as the public sector Banks and insurance, etc. Changes on an industrial scale like these often pose challenges amidst increased competition. Moving and adapting to what is happening not only helps maintain competitiveness, It will also enable them to seize new opportunities in the modern automotive world in terms of demand for electric vehicles. Although there may still be many obstacles in the beginning, unlocking these restrictions will cause the acceptance of electric vehicles to accelerate faster than many expect. Only those involved who move in the right direction and speed will seize the opportunities in the electric vehicle business that are emerging in the near future. (BloombergNEF, 2021).

The steady increase in the cumulative volume of electric vehicles worldwide is a result of measures introduced by various national and international authorities to reduce carbon dioxide emissions. Including research and development of key parts of electric vehicles such as batteries, Drive motors and various control systems, etc. As a result, the price of such key parts has decreased, In addition, there has been the emergence of various types of electric vehicle manufacturers in the United States, China, Japan, and India are increasingly (Zhang, Xie, Rao & Liang, 2014).

The automotive industry is classified as an early industry that is important for the development of the country in terms of economy, employment, Creating added value, development of automotive technology, as well as the development of other supporting industries; And businesses are very involved in the supply chain of the industry. Thailand has a policy to develop this industry continuously since 1961. At present, the Thai automotive industry has been developed until it is able to export cars and auto parts to overseas markets around the world. It is also the largest automotive production base in Southeast Asia and a center for the production of many car brands (Automotive Institute, 2009). It can create economic value for Thailand by contributing to the value of domestic products in the manufacturing industry as well as other businesses that are positively affected, such as upstream industry, Service industry in relation to finance, insurance and after-sales service. In addition, it has become a regional and global leader by having the largest automobile production volume in ASEAN and the 15th among the world's automobile manufacturing countries in 2011, as well as being a production base for motorcycles and auto parts in the region (Automotive Institute, 2012).

Therefore, the researcher is interested in studying The promoting the electric vehicle industry with batteries to develop infrastructure to prepare for electric vehicles.Both promote electric charging stations, Develop laws and regulations related to charging, and promote smart grid technology. It also encourages the production of electric vehicle batteries and the use of domestically produced batteries more efficiently.

### **Research Objectives**

To study the promoting the electric vehicle industry with batteries

### **Research Methodology**

Research on the promoting the electric vehicle industry with batteries, the researchers used a qualitative research method by collecting data from documents (Documentary Research) by reviewing concepts and theories from relevant documents.

### **Data Analysis**

The researcher analyzed data from documents and analyzed content (Content Analysis) by studying various documents and research related to the study to be analyzed and compared in order to obtain accurate and reliable information and perform data validation and reliability with triangular data validation, i.e. Consider the consistency and differentiation of data from time sources, sources of places and sources of people.

### **Findings**

The results of the promoting the electric vehicle industry with batteries, it was found that most of the informants agreed that electric vehicles will play an increasingly important role in the global automotive industry and are a market that has a lot of potential for growth in the future. This is reflected in the continued growth of sales of electric vehicles worldwide. Electric motor vehicles are powered by batteries, making them have larger batteries than other electric vehicles. Using lithium ion batteries with properties that are most suitable for use in electric vehicles, Because it has the highest energy density, Batteries are smaller in size and weight than lead batteries. and nickel batteries of the same capacity. The promoting the electric vehicle industry with batteries must start with the service system, that is, the installation of charging stations, availability of equipment in service stations, the quality of electric vehicle batteries and the availability of spare parts inventory. Placing great emphasis on government policies By the government creating clarity of policy, laws and regulations

are updated, Focus on investment promotion and provide concrete consumer protection. The most important thing is incentives that will require tax rate reductions, subsidies, privileges and recognition. Entrepreneurs must be financed because it is important and necessary to create an entrepreneurial strategy. Due to the battery electric vehicle industry. For Thailand, it is very new, In order to develop the battery electric vehicle industry, it must be developed and expanded regularly. Use of energy charging and installation technology. At present, some educational institutions have begun to study and design charging equipment and accessories, but the raw materials related to the technology for making electric power stations have not yet had a clear production base. In order to have sufficient number of stations and chargers to meet the demand of the service station and power supply business, it is necessary to receive government support regarding the import of raw materials, equipment, Taxes, the presence of a maintenance center, and after-sales service must consider the future prospects of opening a vehicle maintenance business in the future. Since there is a lot of competition in this business, As a result, car maintenance centers want to develop and improve both in terms of quality of repair work, impressive service, and good after-sales service to consumers.

### **Conclusion and Recommendations**

From this research, it can be concluded that the promoting the electric vehicle industry with batteries. The findings are empirical data that will help battery electric vehicle business operators formulate strategies to increase their competitiveness. Benefit electric vehicle business operators with batteries to improve Conduct business to increase the competitiveness of the organization. In addition, relevant parties, both public and private, can be used to formulate policies to promote, Develop the battery electric vehicle industry to be more competitive in the future.

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