

Original Paper

Introduction to the Development Trend of New Energy Vehicle

Industry

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Abstract

So far, the vast majority of cars on the market are still cars that consume gasoline and diesel conventional fuels for power. In people's deep-rooted thinking, the promotion of new energy vehicles and the establishment of the new energy vehicle industry chain require the inclination of national policies, thus it seems that the development of the new energy vehicle market still needs a long period of policy guidance and technological breakthroughs. The following is a brief description of why new energy vehicles should be developed, the current situation of new energy vehicles in various countries and China's policy support for new energy vehicles.

Keywords

New energy vehicles, Energy shortage, Policy

1. Energy Shortage Promotes New Energy Development

The development of new energy vehicles is mainly due to the limited energy of the earth⁷ and the importance people attach to environmental protection. Although most of the earth is the ocean, human's ability to use marine resources is very limited, while energy on land is being consumed at a rapid rate, and the resulting environmental problems are very serious. Energy is the basis of all industries and the key to normal life for people. Global energy shortage, so that energy has become a major constraint on the economic and social development of countries, has attracted the high attention of countries, on the basis of improving energy utilization, the development of renewable energy has become a major way, the development of new energy can open up new paths for the development of industry, creating new possibilities.

China is the second largest energy consumer, and the economy is in the stage of rapid development, too much reliance on imported crude oil will undoubtedly become a constraint, the main energy consumed

in China is coal, less oil and natural gas, which is mainly due to China's unique socio-economic geographical environment, the development of new energy will undoubtedly need to take into account these aspects of the problem, not only in the new energy technology needs a breakthrough, and new energy In addition to this, the structure of our economy also needs to be changed appropriately, so the development of new energy needs to be a major change in all sectors.

2. New Energy Vehicles

As a major pillar of China's industry, automobiles play an important role in driving China's development. The development of the new energy vehicle industry will not only play an important role in energy consumption and environmental protection, but will also inject fresh blood into China's new industries. According to the definition of the National Development and Reform Commission's announcement, new energy vehicles refer to vehicles with advanced technical principles, new technologies and new structures by using non-conventional vehicle fuels as power sources (or using conventional vehicle fuels and adopting new on-board power devices) and integrating advanced technologies in power control and drive of vehicles.

The purpose of new energy vehicles is to reduce the dependence of car power on oil, but as of now, although new energy vehicles are using other alternative energy sources to conventional fuels as much as possible, due to the limited use of technology for unconventional fuels, some will still rely on conventional fuels to drive to make up for the lack of new energy in some areas.

The main direction of new energy vehicle development in the United States is bio-energy vehicles, and ethanol and hybrid vehicles also have a certain market share. The United States is rich in water resources, with the Mississippi River, humid climate, fertile land, extensive plains and modern agricultural technology, the quality of labor is also high, so that the United States is one of the world's largest food producers and exporters, it is because the United States has abundant cereal crop resources, so the use of bio-prepared ethanol instead of automotive fuel has become an important direction for the development of new energy vehicles in the United States. The EU mainly develops clean diesel vehicles, they value energy saving and emission reduction, the greenhouse gas emissions control is very strict, in the diesel engine has mature and advanced technological advantages, in addition, the EU also attaches great importance to biofuel as a new energy path. Japan's new energy vehicles are mainly hybrid vehicles. Japan is an island country with poor resources and greater dependence on oil, so it attaches great importance to the development of new energy, and in recent years has vigorously developed hybrid vehicles and has its own unique technology. The main types of new energy vehicles in China are natural gas-powered vehicles, which are mainly used in public vehicles such as buses and cabs, and also attach great importance to the development of bioenergy. In addition, the number of invention patents on new energy vehicles in China is also increasing year by year, concentrated in enterprises and universities, widely distributed nationwide but without forming a technology center. Among them, there are more patent applications for inventions related to hybrid vehicles and pure

electric vehicles compared to fuel cell vehicles.

3. State Policies Related to New Energy Vehicles

In the early stage of development, new energy vehicles, the overall development strategy goal of automotive energy at this stage is to achieve sustainable development of automotive energy power and develop a new generation of energy power system. New energy vehicles are not as good as traditional fuel vehicles in terms of vehicle dynamics and cost. If new energy vehicles are directly connected to the market at present, they will definitely be constrained by various aspects such as technology and cost if they directly participate in commercial competition in the market without preferential policies, but the development of new energy vehicles needs to occupy a certain market and consumer participation in order to promote the development of new energy vehicles in a better direction, and At this stage, new energy vehicles need the support of national policies to capture a certain market share, improve their industrial chain, attract more financial support, and wait for the technology to mature, so as to lay the foundation for new energy vehicles to replace traditional energy vehicles to occupy new markets.

Although policy can improve the possibility of new energy vehicle development, excessive policy tilt may also lead to the opposite effect. Taxation is an important tool of industrial policy, and Fan Huixia believes that the government can only act in places where the market cannot act, and industrial policy should play a leveraging role instead of replacing market decisions. If the policy is forced to overly tilt the new energy vehicle industry, the industry can not participate in the market competition, in fact, can not promote the development of the new energy vehicle industry, but will become the accelerator of the decline of this industry. How to use taxation scientifically, respect the market and protect the development of new energy vehicles to a certain extent is very important in this activity of automotive transformation.

China's new economic normal in order to promote industrial structure transformation and upgrading, new energy automotive industry is positioned as one of the seven strategic emerging industries. China's new energy vehicle industry policy has been developing rapidly since 2009 under the promotion of the "Ten Cities, Thousands of Vehicles" campaign. In 2009, the Ministry of Industry and Information Technology (MIIT) issued a document that determined that investment projects are not subject to the minimum threshold of the traditional automobile industry and can decide their own scale and investment amount, which greatly reduced the entry threshold of the new energy vehicle industry. It has prompted innovative ideas to form specific industries in various aspects and also laid the foundation for the formation of a perfect industrial chain in the future. Local purchase subsidies have the greatest impact on the promotion of new energy vehicles, with the highest subsidy in Shenzhen reaching 60,000.

The U.S. support policy for new energy vehicles is reflected in the purchase subsidies for new energy vehicles, perfect charging facilities, and the introduction of "oil restrictions". The European Union has adopted a parallel policy of incentives and penalties to encourage the use of new energy vehicles and

finer for vehicles that exceed the emission standards for fuel vehicles. Japan's new energy vehicles started early and developed the fastest, and new energy vehicles can enjoy multiple benefits such as weight tax and income tax.

4. Conclusion

In summary, the global energy shortage has prompted countries to want to the idea of car power sources, and in recent years, new energy-related technologies in various countries are changing the development of major industries internationally, and the country has adopted relevant policies. The development of new energy vehicles is proceeding rapidly.

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