



Preface

I. Auto Industry Suffering Negative Growth for the First Time

According to the statistics of the CAAM, in 2018, the annual production and sales of automobiles in China were 27.809 million and 28.081 million respectively, down by 4.2% and 2.8% respectively compared with the level of 2017. It was the first year-on-year decline during the past 28 years. In terms of product categories, the production and sales of passenger cars decreased by 5.2% and 4.1% respectively, while those of commercial vehicles increased by 1.7% and 5.1% respectively, so passenger cars should be mainly responsible for such negative growth. As for the specific reasons, after years of the rapid development of the Chinese auto industry, the rigid demand of consumers for vehicles has been greatly met, and new demand gradually weakened. In addition, consumers tend to be more rational under the combined impact of the reduction in disposable income (excluding all kinds of rigid expenditures), traffic control and purchase restriction, high cost to use the vehicle, difficulty in parking, ride-sharing, etc.

In 2018, 1.27 million and 1.256 million new energy vehicles were produced and sold in China respectively, up by 59.9% and 61.7% separately from the level of 2017. Notwithstanding that the new energy vehicles continue maintaining a relatively high growth rate, the main reasons are the government's fiscal and tax support policies, and the convenience offered by various local governments for the purchase of vehicles and traveling. With the gradual withdrawal of subsidy policies, how to bridge the gap between new energy vehicles and conventional energy vehicles in cost still needs to be realized through rapid technological progress and large-scale mass production.

II. Coordinated Development Required for Energy-saving and New Energy Vehicles

In 2018, the application proportion of technologies for conventional energy vehicles, such as turbocharger, GDI, and idling stop-start, was 51.21%, 49.00%, and 48.96% respectively, while that of manual transmission (MT) continued declining by 8 percentage points from 30% in 2017. Such technologies as a three-cylinder turbocharged engine, Miller cycle, hybrid power, etc., were also developed by a certain degree. Thanks to this, the average fuel consumption of conventional energy passenger cars dropped to 6.60 L/100 km in 2018, down by 2.51% from the level of 2017. If the preferential for the new energy vehicles were calculated in accordance with the national standards, the average fuel consumption was about 5.80 L/100 km after the new energy passenger cars were included, down by more than 12%. Local enterprises produced more new energy passenger cars, and their average fuel consumption before and after the new energy passenger cars was included was 6.86 L/100 km and 4.74 L/100 km respectively, with a decrease rate up to 31%.

Although we are getting closer to the industry target of average fuel consumption, i.e. 5.0 L/100 km in 2020, we are facing greater difficulties, and at the same time, such a getting closer should be more attributed to new energy vehicles. There are still some rooms for conventional energy vehicles to drag down their fuel consumption, so they need to play a more significant role. In the short run, conventional energy vehicles are still the main strength in the market as well as the key target of energy conservation and emission reduction. Enterprises, against the backdrop, that the central government is vigorously promoting new energy vehicles, should further enhance the development and application of energy-saving technologies of conventional energy vehicles, in a bid to achieve coordinated development.

III. Insisting on Drive by Double Wheels of Policy and Market

The auto industry is widely recognized as the pillar industry to the national economy. Over the past years, due to the needs of developing economy as well as

expanding and enhancing the industry, the central government has formulated a series of strong policies to endorse it, and achieved good results, such as vehicles going to the countryside, subsidies for the promotion and application of new energy vehicles, deduction and exemption of car purchase tax and vehicle and vessel tax, CAFC and new energy vehicle credit, etc. What needs to be noticed here is that we are still in a critical development period of the auto industry. If we want to eventually shift the focus of the world auto industry and bring its leading role into full play, we have to seize the opportunities created during the dividend period featured with large market and stable growth in China, accelerate the optimization of management methods, continuously enhance the awareness of innovation and development, realize the upgrading of energy conservation and new energy technologies through the active and reasonable guidance of policies on the basis of fully respecting the laws of market development, and continuously meet the growing and changing market demand.

The book will also provide scientific references and decision-making basis for national and industry management departments through continuous tracking of the energy-saving and new energy vehicles market, technologies and policies. For any insufficient points, your valuable advice would be welcome.