Thailand Automotive Institute Proposed 5 Urgent Measures,
Pushing Thailand as Next-Generation Automotive Industry Base

- **Thailand's Vision on Future Mobility "Towards high value-added production base of next-generation vehicles"**
- **Targeting Thailand as next-generation vehicles production base with the volume of 400,000 units in 2030**
- **Enhance existing entrepreneurs and increase potential for new entrepreneurs to next-generation vehicles**
- **Restructuring the entire vehicle taxes**

The outcome of The 21st Conference of Parties (COP21) on Climate Change in Paris, France required all countries to send their operational goals to reduce greenhouse gas emissions continually, causing Thailand need to have greenhouse gas reduction measures in order to achieve this goal. In 2015, Thailand, by the Ministry of Energy, has implemented measures to reduce energy use intensity. One of them was the measure to reduce energy consumption in the transportation sector with the target to use plug-in hybrid electric vehicles (PHEVs) and battery electric vehicles (BEVs) totaling 1.2 million units within 2036. In addition, the government has a policy to promote the next-generation automotive industry as one of 10 target industries to be a mechanism to drive economy for future.

In the initial stage of promoting the next-generation automotive industry, in 2017 the electric vehicles (xEVs) have been prioritized by The Cabinet approved the measures to support the electric vehicle production in Thailand, setting target of 25% of any electric vehicle production domestically by 2036 and also measures to promote xEVs from other sectors which, if integrated with concrete, will make more efficient and successful promotion of next-generation vehicles in Thailand.

However, next-generation automotive technology is not just xEVs but also includes connected vehicles or autonomous vehicles including the tendency to use vehicles will change to more shared mobility. Currently, Thailand does not have any policies or plans covering all these next-generation automotive technologies which, if Thailand can utilize all of these technologies, they can reduce environmental problems, traffic congestion reduces, accidents and helps people travelling around thoroughly and efficiently.

Thailand Automotive Institute had the concept of making a research report on the direction of future automotive industry in Thailand in order to make policy recommendations for automotive industry development and promotion in Thailand to present to relevant government agencies for further consideration by establishing a working group consisting of representatives from 4 main agencies, namely, Office of The National Higher Education, Science, Research and Innovation Policy Council (ONES), National Science and Technology Development Agency (NSTDA), Faculty of Engineering, Chulalongkorn University and Thailand Automotive Institute. The operation guideline consists of 3 parts which are as follow:

1. **Literature review** – to get information on ways to develop next-generation automotive technology, goals development and benefits from technology including the goals and policies from various countries related to next-generation vehicles and also to know the trends of global automotive markets because more than half of Thailand's automotive production is for export and use it as a case study for effective government policy implementation in Thailand. In addition, this literature review also includes information about the future changes in automotive value chain.

2. **In-depth interview** – various opinions and suggestions from stakeholders of Thai automotive industry such as public sectors, motorcycle and car makers, auto-parts manufacturers, experts from academia and automotive media.

3. **Workshop** – stakeholders that are representatives from over 100 agencies both public and private sectors brainstorming by using foresight method to visualize the future of Thai automotive industry in 2030 and operational guidelines to achieve those goals.

These operations took approximately a year to have a future perspective of Thai automotive industry which responds the consumer needs with intelligent mobility or "Smart Mobility" which means connected mobility in various modes of transport with conveniences, safety, environmental friendliness and also affordable price to enable people to have better access at all levels. In 2030 Thailand will be an important regional production base of next-generation vehicles by producing 2.5 million units and 1.5 million units of them will be for domestic markets, 15% of BEVs, 60% of autonomous vehicles level 3. Public transportation such as buses, tuk-tuk, and motorcycles will be all BEVs. In order to reach the long-term goals that Thailand will be a next-generation vehicle production base which has a high value-added supply chain by conducting research and development in parallel with being production base of high value added components such as the production of batteries, motors, electronic components and software, tires and bodies using lightweight materials.

On September 2, 2019 Mr. Adisak Rohitasune, Acting President of Thailand Automotive Institute has presented "Thailand's Vision on Future Mobility" to the stakeholders both public and private sectors with 5 urgent measures and 14 ongoing measures to drive towards these goals. The 5 urgent measures which are (1) Restructuring the entire vehicle taxes in accordance with the concept "Clean-Affordable-Safe", (2) Define consumers benefits and privileges both monetary and non-monetary incentives to create markets, (3) Revise rules and regulations related to electric charging business, (4) Enhance the production capabilities of current entrepreneurs and personnel development to be ready for next-generation vehicles production (Reskill and Upskill) including creating more business opportunities for entrepreneurs which are unable to move into the next-generation automotive industry, and (5) Prepare graduates' readiness from academia to enter the next-generation automotive industry (New skill).

Besides the next-generation vehicles being useful to consumers for traveling with conveniences, safety, energy efficiency and environmental friendliness, also being tremendous value in term of business. Expecting the value of automotive manufacturing business and various services relating the use of next-generation vehicles globally will total up to US$1 trillion in 2030. Therefore, Thailand should accelerate its own development in order to seize such enormous foreign income as much as possible which its achievement depends on the appropriate policy implementation and close cooperation in all related sectors.

And Thailand Automotive Institute will submit this policy recommendation to Office of Industrial Economics (OIE), Ministry of Industry and any other government agencies interested in order to lead the full promotion of next-generation vehicles and push nation's transition into next-generation vehicles or "Smart Mobility" and become the leading regional high value-added next-generation automotive production base.