3 August 2017

"CU TOYOTA Ha:mo"

Project Announcement of Ultra small EV sharing introduction in Bangkok and collaborative MOU signed by Mr. Michinobu Sugata, President of Toyota Motor Thailand Co., Ltd and Professor Bundhit Eua-arporn, Ph.D., President of Chulalongkorn University

Mr. Ninnart Chaithirapinyo, Chairman of Toyota Motor Thailand Co., Ltd. (TMT) , along with Mr. Keiji Yamamoto, Managing Officer of Toyota Motor Corporation and Executive Vice President of Connected Company, as well as Associate Professor Boonchai Stitmannaithum, D.Eng., Vice President of Chulalongkorn University, reveal about the collaborations under " CU TOYOTA Ha:mo " project on 3 August 2017.

Connecting vehicle with network by IoT

Today, the situation around us is changing rapidly thanks to progressive aging in developed nations, population growth and urbanization in emerging nations, and an increasingly diverse range of energy sources. Connecting vehicle with network by IoT (Internet of Things) will not only create new services for the society and customers but also provide important business base for car manufacturers.
In 2016 Toyota established Connected Company which enabled to speed up for decision making of connected strategy and implementation.

Mr. Keiji Yamamoto, stated, *"Toyota will meet the challenging goal of smart mobility in addition to innovative vehicle technology to realize comfortable, convenient lifestyles that offer people peace of mind. In this smart mobility society, vehicles will contain new kinds of attractive and value-added*

functions and features that closely connect all aspects of human activity through a platform to connect people, vehicle and society in order to contribute realizing smart mobility society."

" Ha:mo " Harmonious Mobility Network

Through next-generation transport systems like Ha:mo, Toyota aims to help tackle these issues by connecting personal vehicles with public transportation systems for seamless & enjoyable ride. Toyota believes that one possible solution could involve Ultra-compact Electrical Vehicle car-sharing services that enable freedom of movement with minimal environmental impact by introducing Ha:mo transport system in Japan (Toyota City, Tokyo, Okayama and Okinawa), in France (Grenoble) and today in Bangkok, as the first attempt of Toyota in emerging country.

Mr. Keiji Yamamoto, stated, *"Ha:mo is an ultra-compact electrical vehicle sharing, which is suitable for urban short distance travel. And user of Ha:mo can drop off the vehicle at his or her destination. And Ha:mo is the first and the last miles mobility to make the travel easier. Introduction of Ha:mo in Bangkok can be a good role model case of multimodal transportation to solve various traffic problems in emerging countries. I am very much looking forward to seeing that Ha:mo would be accepted by Thai people, especially young generation for future society."*

The Project called "CU TOYOTA Ha:mo" is the collaborative occasion between Chulalongkorn University 100th Anniversary and Toyota Motor Thailand 55th Anniversary in order to trial car-sharing system at Chulalongkorn University areas by utilizing ultra-compact Electrical Vehicle for short distances which can connect from public transport to user 's destination.

Mr. Ninnart Chaithirapinyo, stated *"The Project consists of 2 phases as planned. The 1st phase called Development Phase (December 2017 – November 2019). After concluding and considering operation results from the 1st phase, the 2nd phase will be implemented as commercial phase by involving interested partners to invest and expand operation area.*

The project will start with 10 EV vehicles in this December. We plan to increase more 20 EV vehicles around middle of next year. We will have 30 EV vehicles in total for the 1st. phase (2 years).

Service areas cover the campus and commercial area in Churalongkorn university site by spreading 12 Ha:mo stations in strategic areas with 10 charging stations and 33 parking lots to serve user's demand and connect to public transportation such as BTS,MRT and public bus. Target users are students, lecturers, officers and commuters in the area. By registering membership, service fee starts from 30 Baht for 20 minutes."

Moreover, the project plans to utilize " CU TOYOTA Ha:mo " as an Open Innovation Platform to Co-Develop Future Mobility Society by increasing social and personal adaptability of EV sharing which proceed through technology development and social development. By involving the interested companies, students, researchers, professors and other organizations, they will collect ideas, theme selection, project scheme development, and trial as onsite experiment which will bring synthetic solutions to Thai people for Thailand future EV sharing.

Associate Professor Boonchai Stitmannaithum, stated *"As our vision, we aim to be a world-class national university that generates the knowledge and innovation necessary for the creative and sustainable transformation of Thai society.* We *established "CU Innovation Hub" last year to develop innovators and innovation towards world-class national innovative university to transform how Thais live, learn and play. Moreover, we also developed a big project in our area named "CU Smart City" as a model of future Bangkok in various dimensions of SMART such as energy, mobility, environment, etc. So, we are very pleased to collaborate with this project and ready to support co-develop future mobility society program under "Open Innovation Platform" concept."*

Mr. Ninnart Chaithirapinyo concluded, *" As mentioned in project details, I hope to see strong collaboration and support from all related in order to develop a new mobility option in the city. Key success is the creation of strong collaborative network which brings benefit to Thai society for sustainable growth in the future."*