MNRE has joined with academicians to use sensors to monitor PM$_{2.5}$

On 20th March 2021, Mr. Athapol Charoenshunsa, Director General of Pollution Control Department (PCD), Ministry of Natural Resources and Environment (MNRE) revealed that MNRE had invited the associated agencies: Chulalongkorn University, Mahidol University, Chiang Mai University, Prince of Songkla University, Rajamangala University of Technology Lanna, Asian Institute of Technology, Electricity Generating Authority of Thailand (EGAT), The Engineering Institute of Thailand under H.M. The King's Patronage, National Telecom Public Company Limited, National Research Council of Thailand, and National Institute of Metrology (Thailand) to attend the meeting on "How to take advantage from sensors to build PM$_{2.5}$ monitoring network in the country".

Mr. Athapol said that the conclusions of the meeting were as follows:

1. The meeting approved the integration of agencies conducting the projects of air quality measurement, academician, and sensor manufacturers in Thailand such as EGAT has plan to install 200 particulate matter measuring points in the area of communities and the area of EGAT. Chulalongkorn University will implement the Project on 'Sensor for All' by installing PM$_{2.5}$ measuring sensors totally 1000 points in countrywide, National Telecom Public Company Limited will implement the National Environment Open Data Project by installing PM$_{2.5}$ measuring sensors totally 8,000 points in countrywide, and Chiang Mai University will maintain more than 400 points of the air quality measuring instrument network (Dust Boy) in countrywide and will expand target to 2000-3000 points in all sub-district. All agencies agreed to share technology data in order to improve quality and efficiency of sensors by using Artificial Intelligence (AI) and Big Data technologies to report results rapidly and promptly and can respond to the new generations as well as leading to further development.

2. The meeting agreed that PCD should provide the air quality measuring instrument installation manual to make the same direction in implementation.

3. The meeting agreed that MNRE should establish the national central network to be the air quality measuring center. Initially, the air quality network should be divided into 2 types: the measurement network according to the legal method and the other method of measurement network.

In this regard, the meeting requested the government sectors to react on exchange of the technology disruption. It is expected that the air quality measuring technology on mobile phone will be served in the near future, Mr. Athapol said.