SUMMARY

Ⅰ. Subject

A Study on the safety in renewable energy, battery and E-mobility(electric mobility)

Ⅱ. Objective

The primary purpose of this project is to contribute to safeguarding human lives and property through the development and conduct of world-standard safety technologies in the field of renewable energy, batteries, and e-mobility comprehensively.

Ⅲ. Scope

1. The evaluation of safety performance pertaining to fire and thermal runaway for battery, encompassing cell, module, and pack
   - Investigation on prevention of fire and thermal runaway propagation
   - Development of reliable fire detection and suppression(extinguishment) system
   - Analysis on mechanisms of fire and thermal Runaway
   - Improvements on battery enclosure material and design
   - Standardization on battery safety Regulation
   - Real-scale fire test on EV(electric vehicle) and ESS(energy storage system)
   - Inspection and assessment of reuse battery safety

2. Estiamation on safety technology of fire and explosion for E-mobility
   - Development of fire prevention and response technology for E-Mobility
   - Analysis on fire hazard of E-mobility
   - Assessment on safety of E-mobility charging infrastructure
   - Establishment of safety regulations and standards for E-mobility