EWG 11 2019A:
Accommodating Disruptive Technology into RE&EE Policies for Energy Security

Munlika Sompranon

Department of Alternative Energy Development and Efficiency (DEDE)
Munlika_s@dede.go.th

APEC EGNRET Meeting

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Month 2020

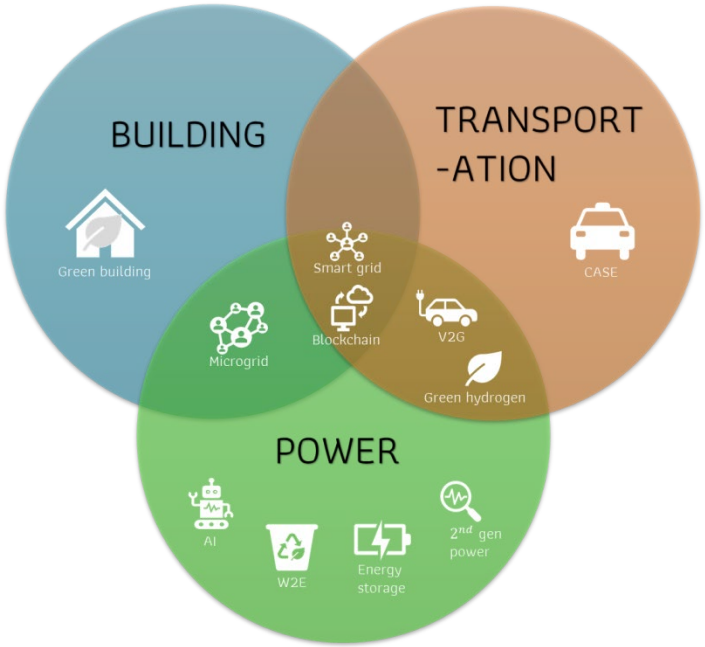
Accommodating Disruptive Technology into RE&EE Policies for Energy Security

- **Project overseer**
  - ✓Department of Alternative Energy Development and Efficiency (DEDE)
- **Duration**
  - ✓Apr 2020 – Oct 2021 (extension due to COVID-19 pandemic)
- **Contractor & Team members**
  - ✓Chiang Mai Rajabhat University (CMRU)
- **Co-sponsoring economies**
  - ✓United States of America; Japan; Chinese Taipei; Hong Kong, China

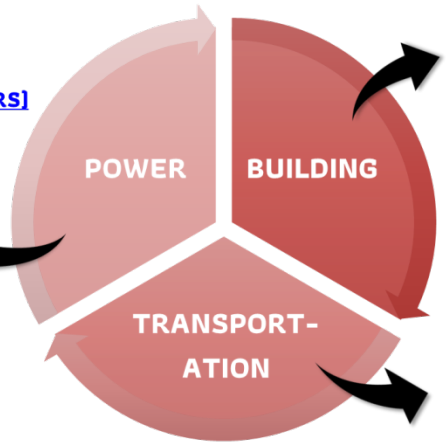
Project details

- Objectives
  - ✓To review the impact of disruptive technologies on the power generation and distribution, transport, and buildings sector
  - ✓To share best practices on RE&EE policies to accommodate the disruptive technologies
  - ✓To build capacity on integration of the disruptive technologies for energy security.
- Workshops & seminar
  - ✓Only 1 WS (2 days meeting & 1 day technical visit): Apr 2021 held hybrid with online participation from abroad and in-person participation in Thailand
- Outcomes
  - ✓Recommendation on necessary RE&EE policies to accommodate disruptive technologies

Reviews of disruptive technologies



SMART GRID



OSSIACO – V2G

Demand Response Sensor [DRS]

WATT-IS – Automated smart meter

DUKE ENERGY – Demand response energy management program

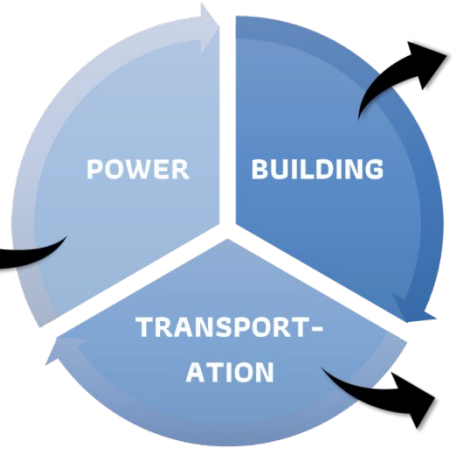
ORSTED – Full value chain energy trading

Nostromo energy – replace Li-on with water storage Intelligent Energy Management of Electrical Power Systems

Driving a smarter future – V1G, V2G, V2H

GMC HUMMER EV - electric truck

BLOCKCHAIN



VLUX - Combining deep learning AI with blockchain

Energy web - Infrastructure blockchain technologies

EnergiToken –Incentivizing renewables investment

A Sustainable Home Energy Prosumer-Chain Methodology with Energy Tags over the Blockchain

Blockchain IoT for Smart Electric Vehicles Battery Management