



Thailand Economy Updates: Energy Efficiency and Digitalization

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EGEEC 58 Meeting

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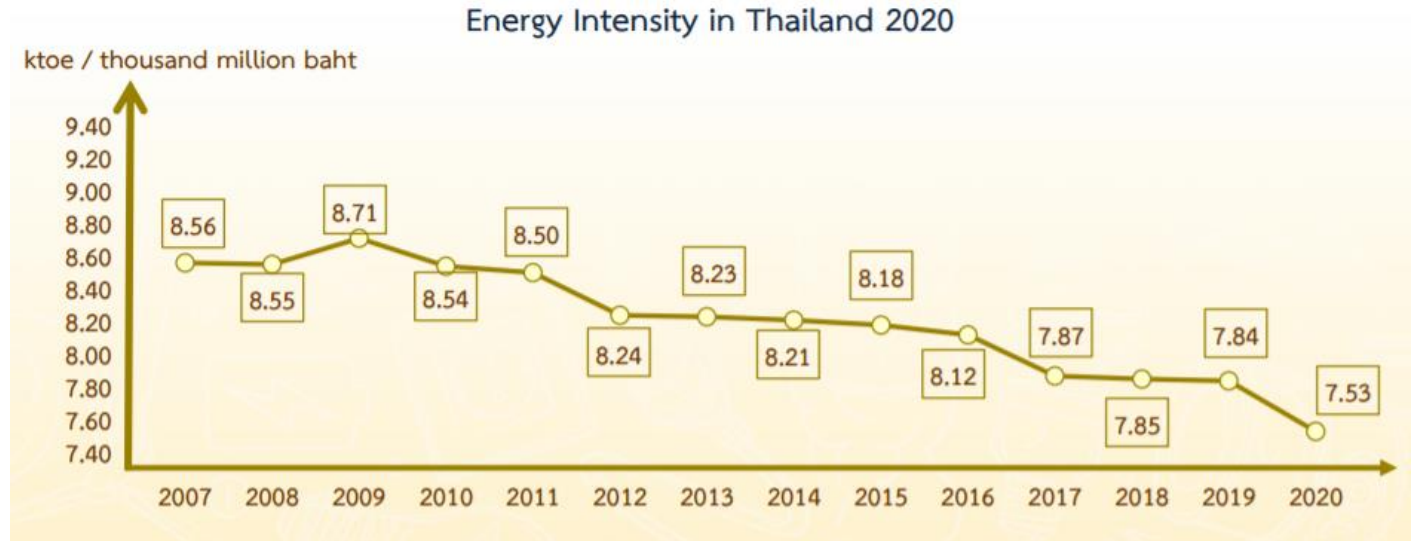
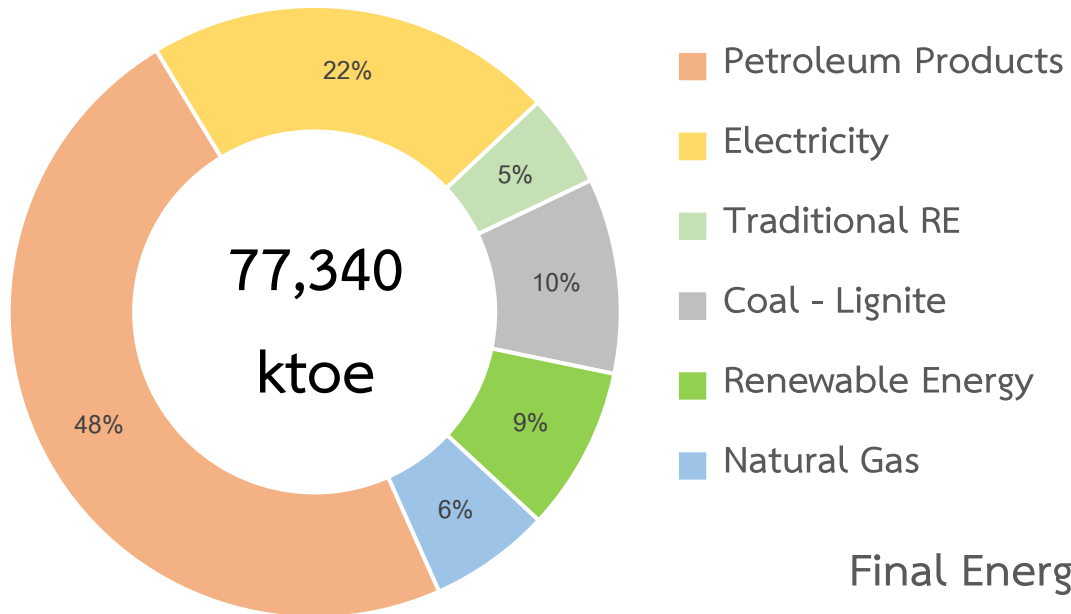
- Energy Situation in Thailand
- Energy Efficiency and Digitalization Policies
- Related Upcoming Projects



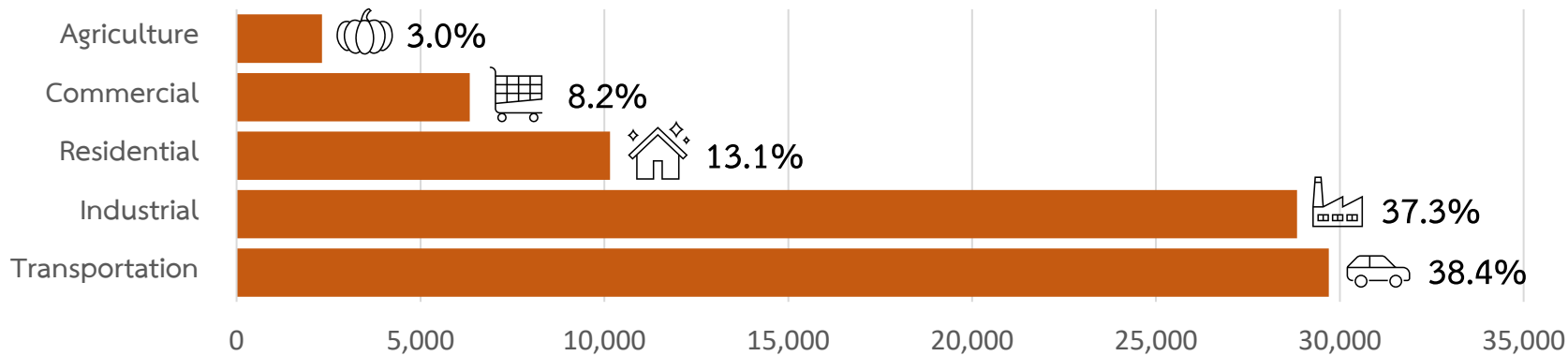
Energy Situation in Thailand



Final Energy Consumption 2020 by Fuel

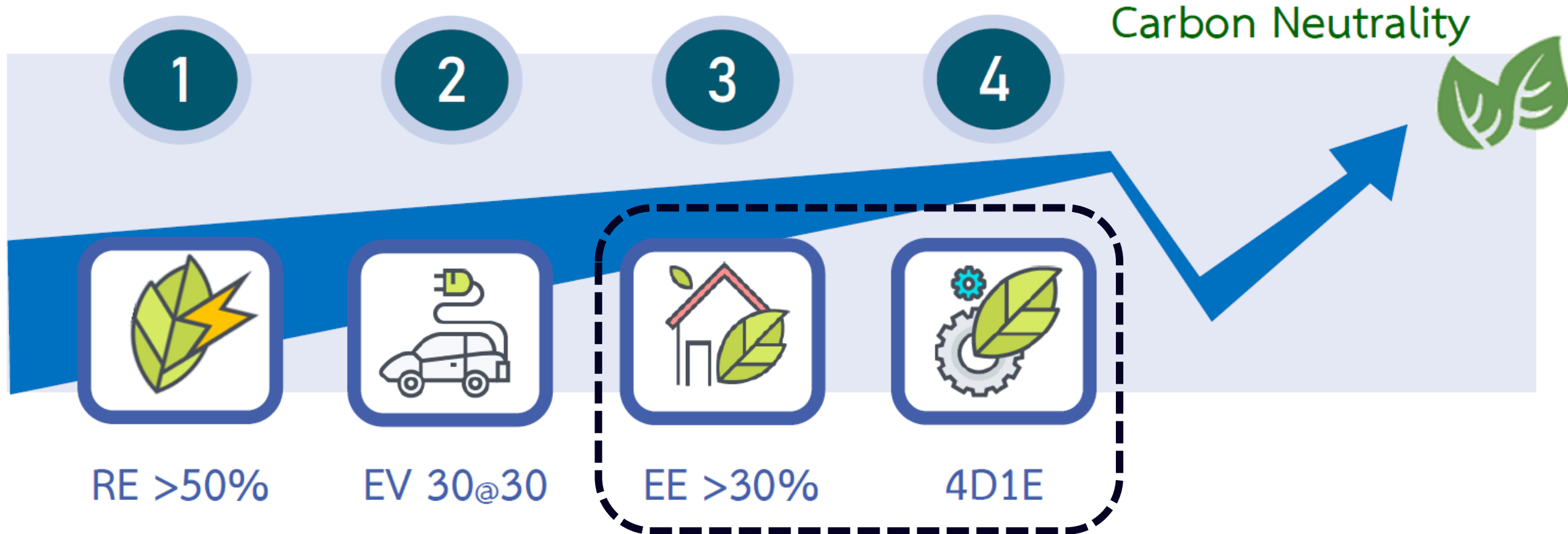


Final Energy Consumption 2020 by Fuel



Energy Efficiency and Digitalization Policies

Policy Direction to National Energy Plan



Long-term Energy Efficiency Implementation 2018 - 2037

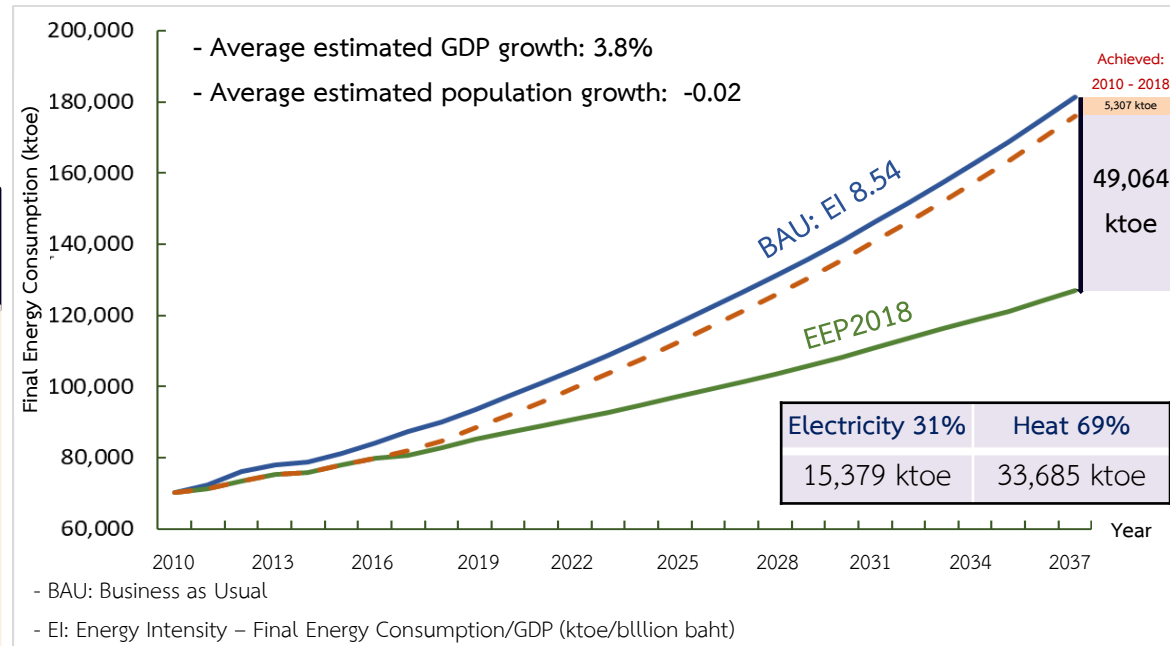
Goal: Energy Intensity reduction by 30%

(approx. 49,064 ktoe) by 2037 – base year 2010

Compulsory	Voluntary	Complement
<ul style="list-style-type: none"> Energy Management Standards Energy Codes (Industrial, Buildings, Residential) Energy Efficiency Resource Standard (EERS) Demand Response Excise Tax (Eco-Sticker) 	<ul style="list-style-type: none"> Equipment Standards and Labeling Financial Supports <ul style="list-style-type: none"> Grants and Subsidy Soft loan Tax incentive Credit Guarantee Innovations (IOT, Smart Building, Big Data) 	<ul style="list-style-type: none"> Human Resources Development (HRD) <ul style="list-style-type: none"> Energy Manager Energy Auditor Technologies Public Relation/Awareness Research and Development

Source: DEDE

Final Energy Consumption Projection



Energy Saving by Sector

Sector	Total	Percentage
1. Industrial	21,137	43
2. Commercial	6,418	13
3. Residential	3,300	7
4. Agricultural	527	1
5. Transportation	17,682	36
รวม	49,064	100

Measure Overview

- Subsidize equipment and machinery replacement (with approved high-efficiency ones) or innovative energy-efficient equipment
- Subsidize for equipment and installation cost
 - **20%** for Designated buildings and factories when replacing with efficient equipment and machinery
 - **30%** for Designated buildings and factories when replacing with efficient equipment and machinery with approved innovative technologies
 - **30%** for non-designated buildings and factories, community enterprise, start-ups, or agriculturiers
- **Supports up to 3 million baht per applicant**
- **Payback period no longer than 7 years**

Examples measures

- ❖ **Installing variable speed motors used with the machine.**
- ❖ **Replacement air compressors, high efficiency**
- ❖ **To improve the power factor.**
- ❖ **Replacing high-performance electric motor**
- ❖ **Insulation**
- ❖ **The use of heat pumps**

Application is opened!
Deadline 21 January 2022

For further information



<https://bit.ly/3bZLmnI>





DIGITALIZATION

Distributed energy resources enabled by big data-driven alignment of supply and demand

Data-driven asset strategies including preventative and condition-based maintenance and predictive outage

Smart grid and smart pipes allow automated controls to improve network resiliency, safety, and efficiency

Customer interactions governed by analysis of customer journeys, segmentation, and personalized communication

Platform supports distributed energy resources and marketplaces



DECARBONIZATION

4D1E supporting the Energy Transformation toward Carbon Neutrality



ELECTRIFICATION



DECENTRALIZATION



DE-REGULATION

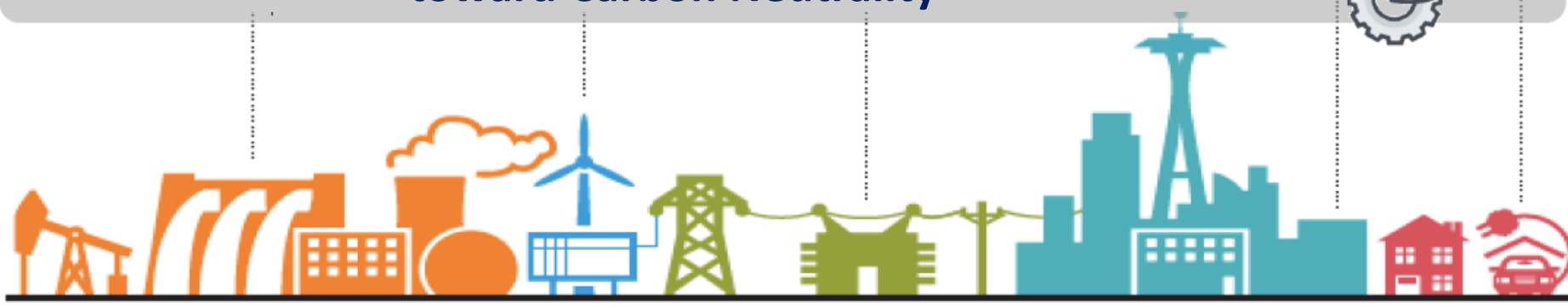
Back-office automation and data-driven decision making



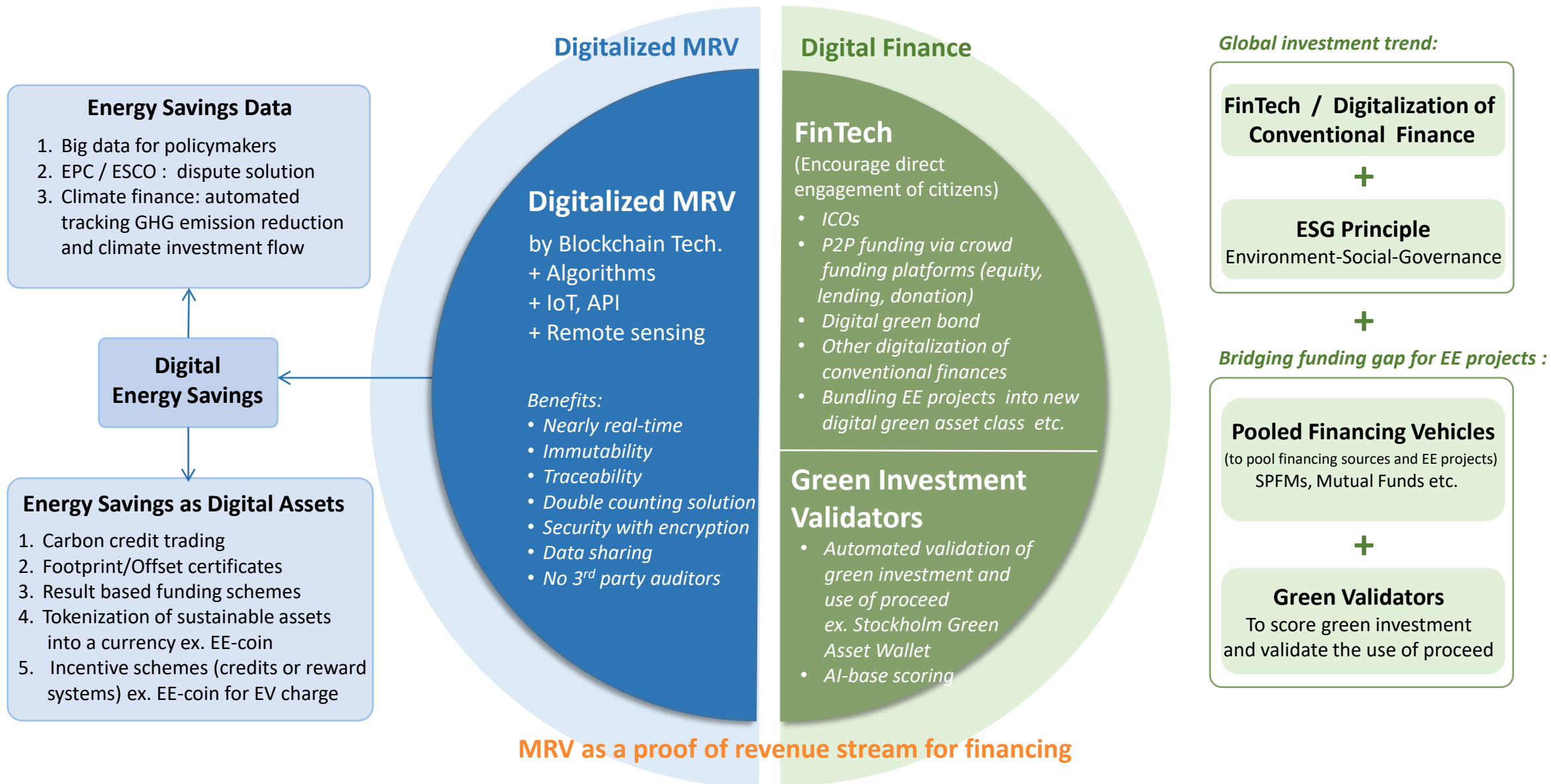
Field workforce with mobile access to maps, data, work-management tools, and real-time expertise



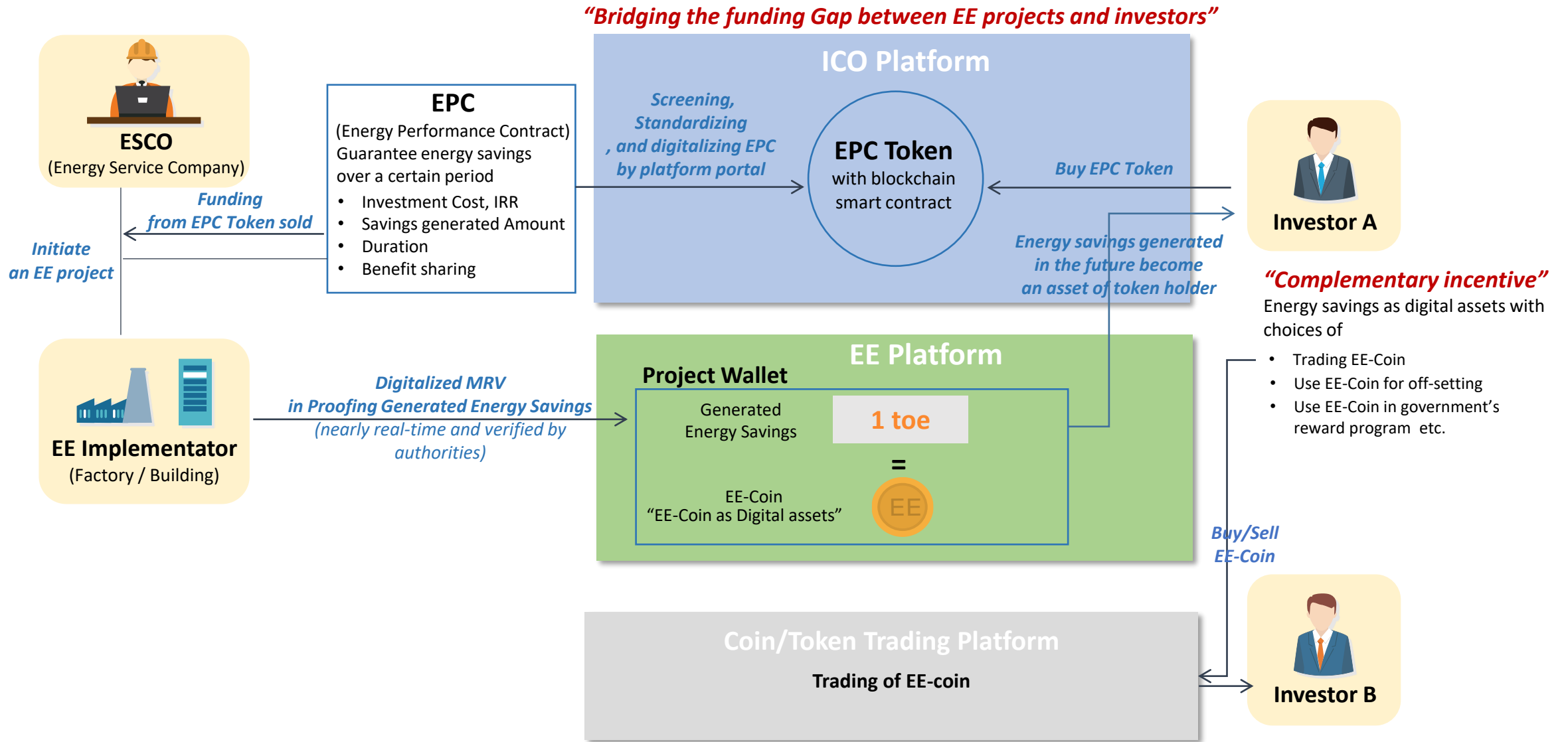
High level of situational awareness to enable energy balancing

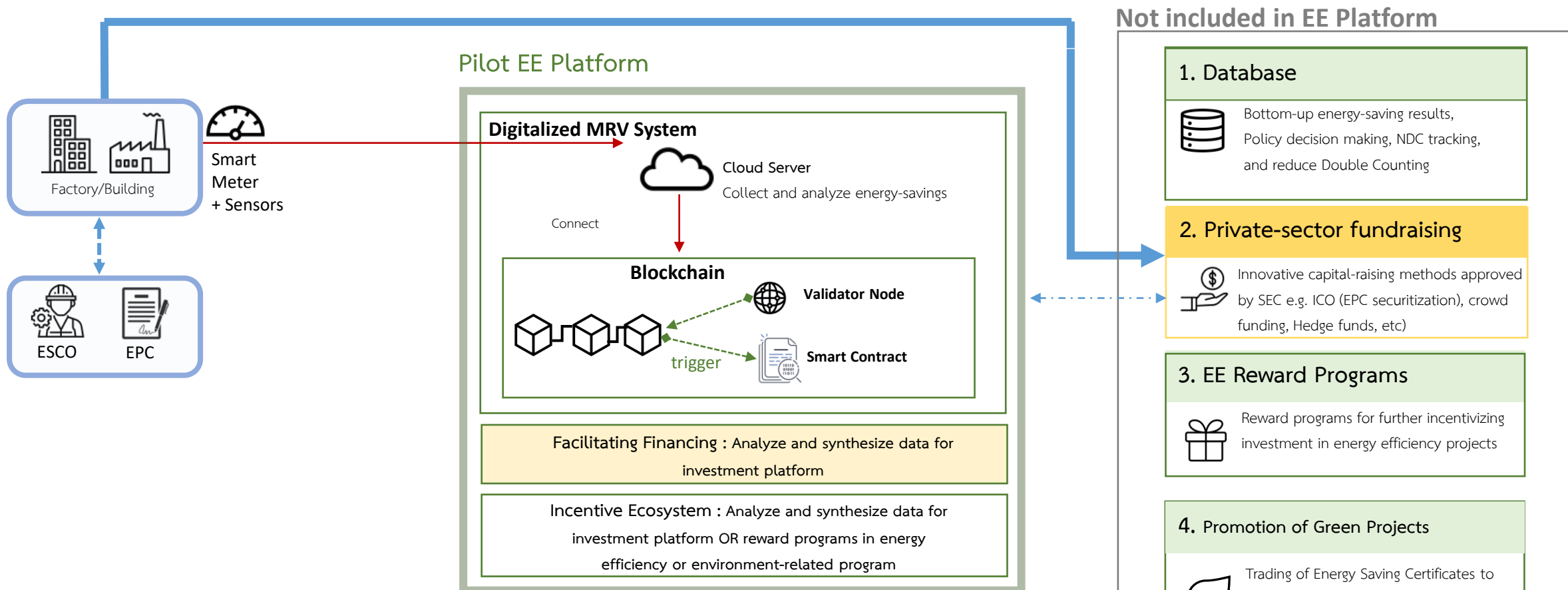


Related Upcoming Projects



Energy Efficiency Coin/Token

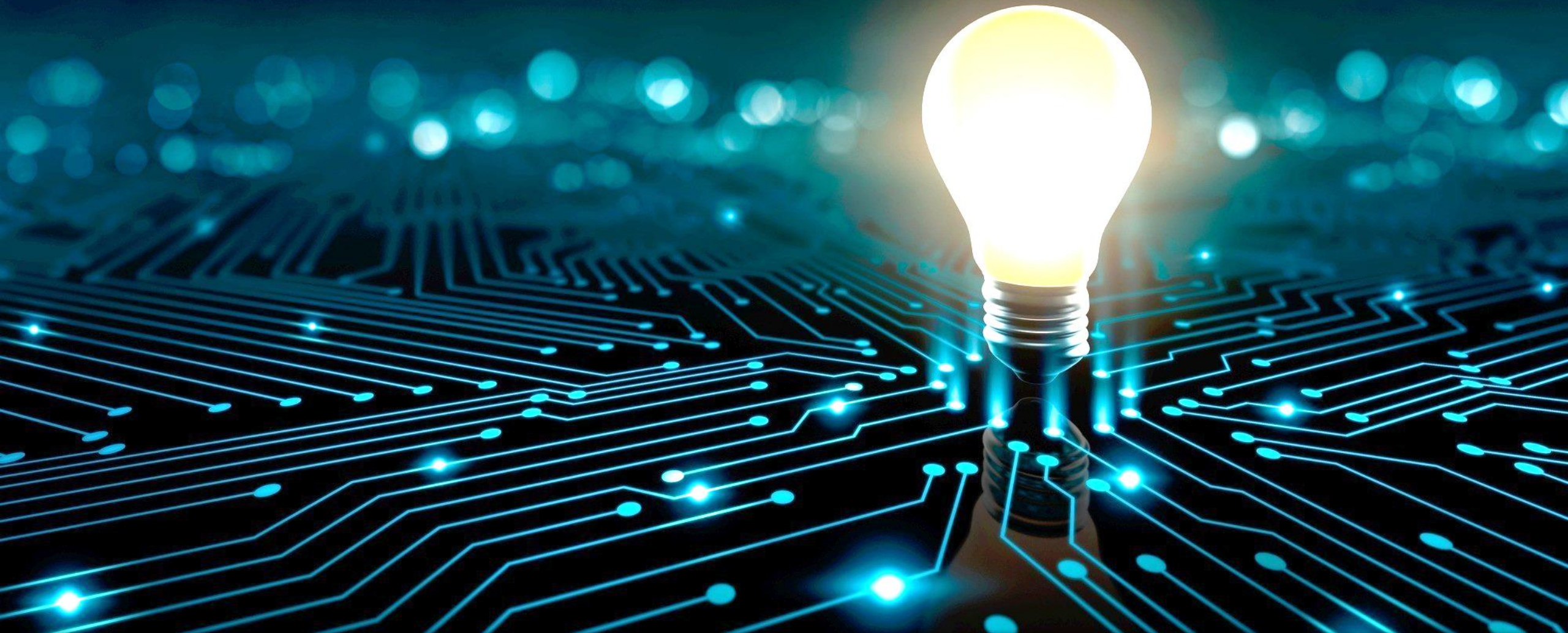




EE Platform as a Technical Assistant

1. To build confidence for investor and reduce the cost of fundraising
2. To oversee technical aspects of energy efficiency projects and MRV process
3. Other technical matters

Thank You



For further information, please contact email: sarat_p@dede.go.th