

EGAT for
ALL

พลังงาน เป็นของทุกคน เพื่อทุกคน



EGAT

Integrating Battery Energy Storage Systems to Support a Clean Energy Future

Narin Phoawanich, Ph.D.
Assistant Governor – Fuel Management
EGAT

October 27, 2022

01

Policy Direction

02

BESS: Flexible Power System & Flexibility *Resource*

03

EGAT's RE Growth Ambitions and BESS Goals

04

EGAT's BESS Experiences & Key Challenges

05

New Business Opportunity



Policy Direction to National Energy Plan

Carbon Neutrality
2050

1



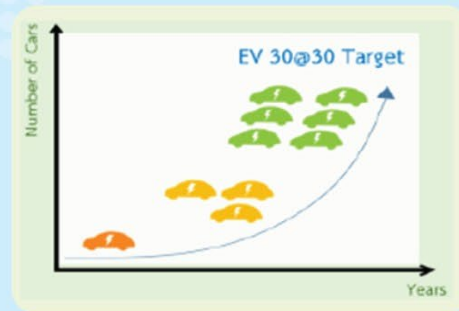
New Generation
RE > 50% w ESS



2



New Car
EV 30@30



3



EE > 30%



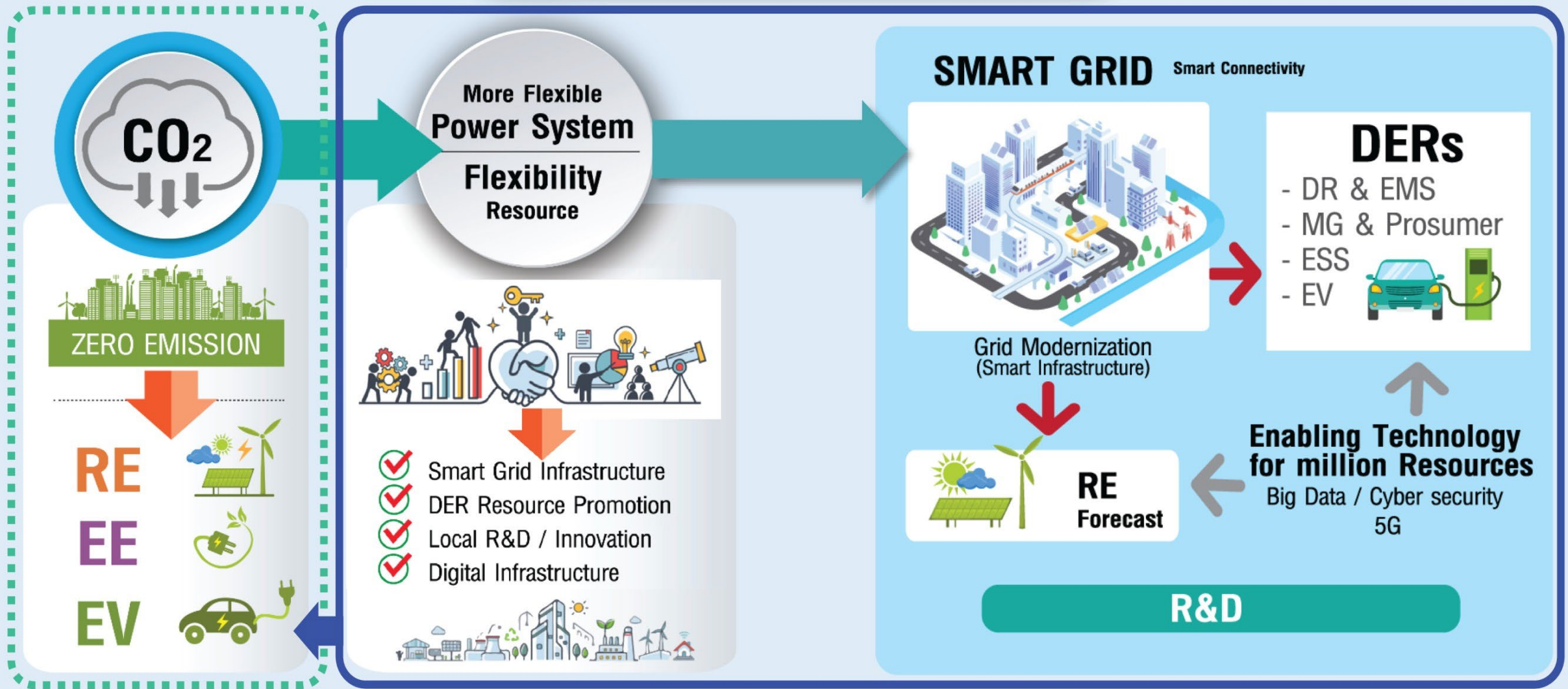
4



4D1E

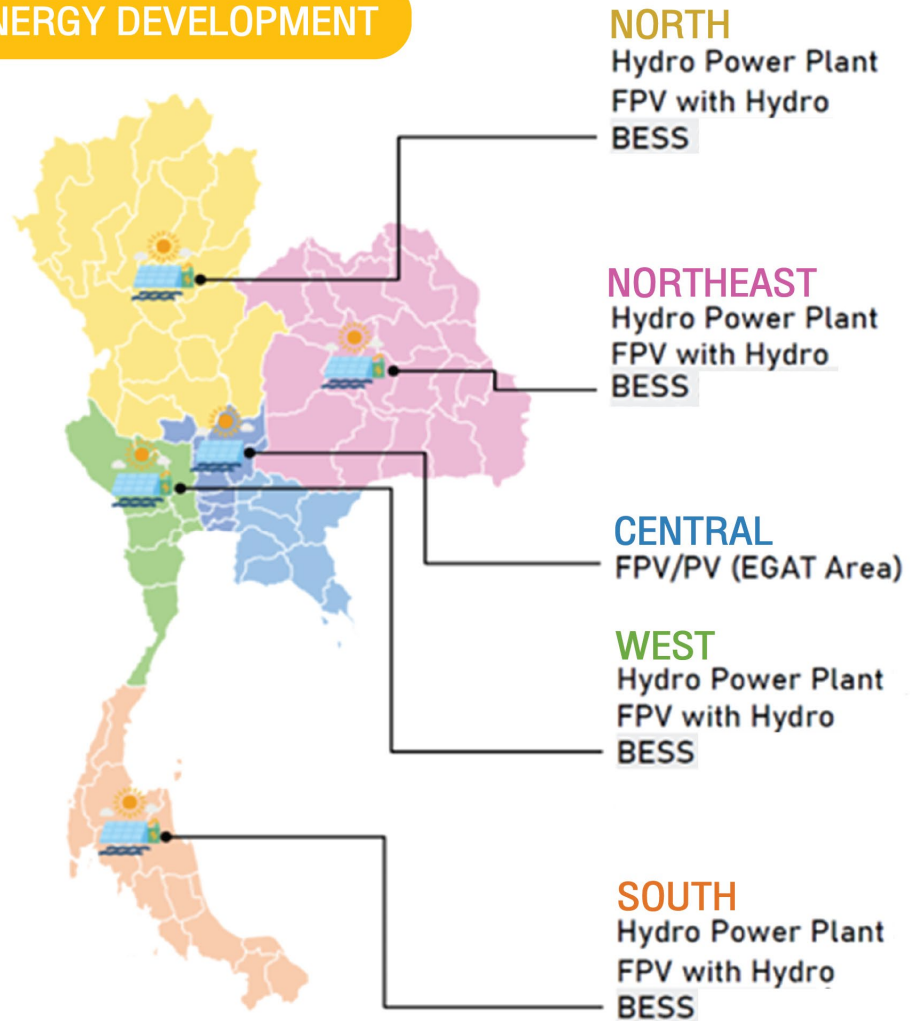
Digitalization
Decarbonization
Electrification
Decentralization
De-regulation

Policy Direction to National Energy Plan (Cont.)



EGAT's RE Growth Ambitions and BESS Goals

EGAT's POTENTIAL RENEWABLE ENERGY DEVELOPMENT



EGAT's BESS Experiences

Energy Storage System High-voltage Substations

- Chai Badan High-Voltage Substations, Lopburi with the capacity of 21 MWh
- Bumnetnarong High-Voltage Substations with the capacity of 16 MWh

BESS technology is utilized to maintain the security and stability of EGAT'S electricity system in terms of voltage and frequency. The fluctuation problem of integrated renewable energy into the system will be solved by BESS installation including power loss reduction. EGAT provides the BESS pilot project at Bamnet Narong and Chaibadan High Voltage Substations to study, evaluate and collect information for developing applications and increasing efficiency of energy storage system.

EGAT's BESS Experiences (Cont.)

BNN's BESS
16 MWh



EGAT's BESS Experiences (Cont.)

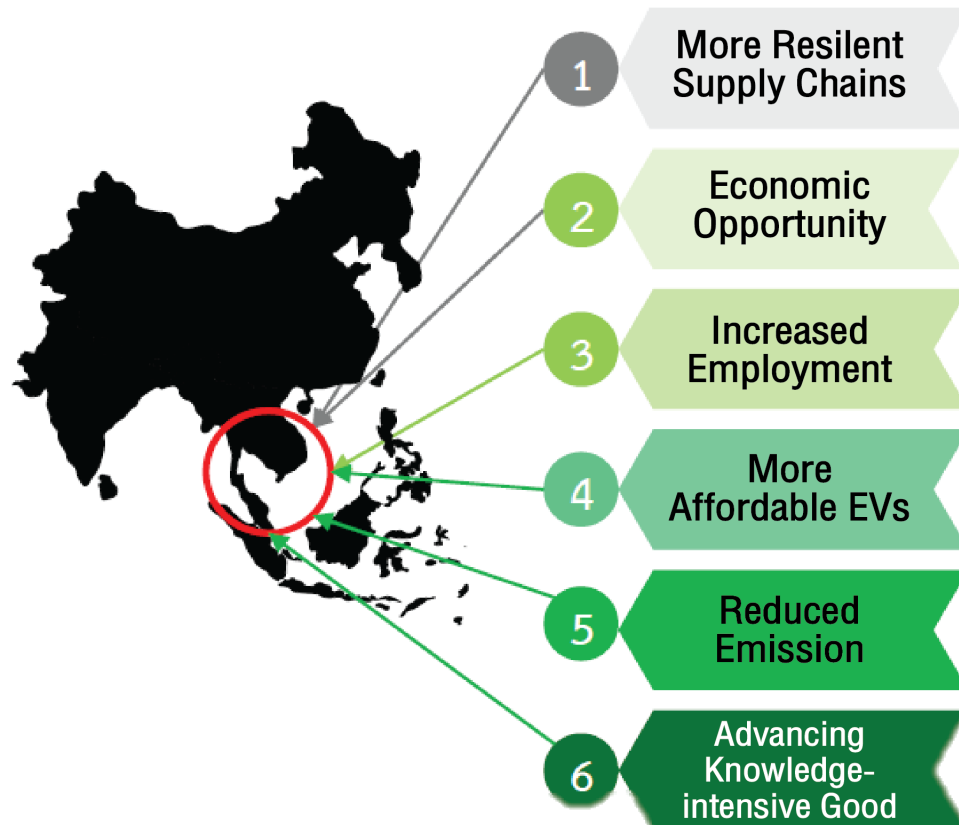
CBD BESS
21 MWh



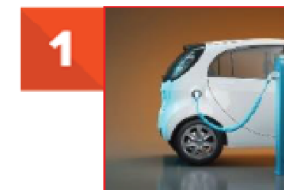
BESS Experiences: Key Challenges

Opportunities, Obstructions, Challenges from Thailand's Battery Industrial Development

Opportunities



Obstructions & Challenges



Demand for EV



Fund



Source of Raw Material



R&D

THANK YOU

