



# Role of the ASEAN Center for Energy to promote the energy transitions in ASEAN

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# ASEAN Policy Framework & Energy Transition



## Mandate for sustainable energy in the ASEAN Economic Community (AEC) Blueprint 2025

The AEC Blueprint tackles need for sustainable energy in two (2) major sections:

- Under “*B8. Sustainable Economic Development*”: **Sustainable energy** is integral to ASEAN’s growth strategy.
- Under “**C4. Energy**”: **To enhance connectivity and sectoral cooperation.** Strategic measures that correspond to the seven (7) programme areas of the **ASEAN Plan of Action for Energy Cooperation (APAEC)**.

## Energy Transition towards Sustainable Development - an AEC priority economic deliverable in 2020:

Set forth in Viet Nam’s 2020 ASEAN Chairmanship under its Priority Economic Deliverables (PED)

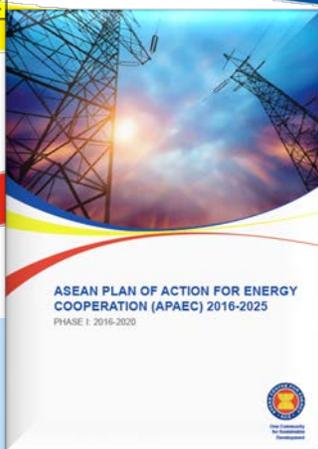
Scope: Development of clean energy systems through regional cooperation in ASEAN to accelerate the **deployment of renewable energy (RE) and further increase energy efficiency and conservation (EE&C)**, hence enhancing implementation of **energy transitions** towards sustainable development.

Key outputs include: recommendations developed under **APAEC Phase II on energy transition towards sustainable development.**

# ASEAN Plan of Action for Energy Cooperation (APAEC) 2016 – 2025



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## 7 Programme Areas

ASEAN  
Power  
Grid  
(APG)

Trans-  
ASEAN  
Gas  
Pipeline  
(TAGP)

Clean Coal  
Technology  
(CCT)

Energy  
Efficiency &  
Conservation  
(EE&C)

Renewable  
Energy  
(RE)

Regional  
Energy  
Policy and  
Planning  
(REPP)

Civilian  
Nuclear  
Energy  
(CNE)

### Phase I (2016-2020): Theme

*“Enhancing energy connectivity and market integration in ASEAN to achieve energy security, accessibility, affordability and sustainability for all”*

### Phase II (2021-2021): Sub-theme

*“Accelerating **Energy Transition** and Strengthening Energy Resilience through Greater Innovation and Cooperation”*

# ASEAN Energy Cooperation & Energy Transition

From the **ASEAN Ministers on Energy Meeting (AMEM)**



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## ASEAN's Role in the Global Energy Transition – discussed at AMEM in 2019

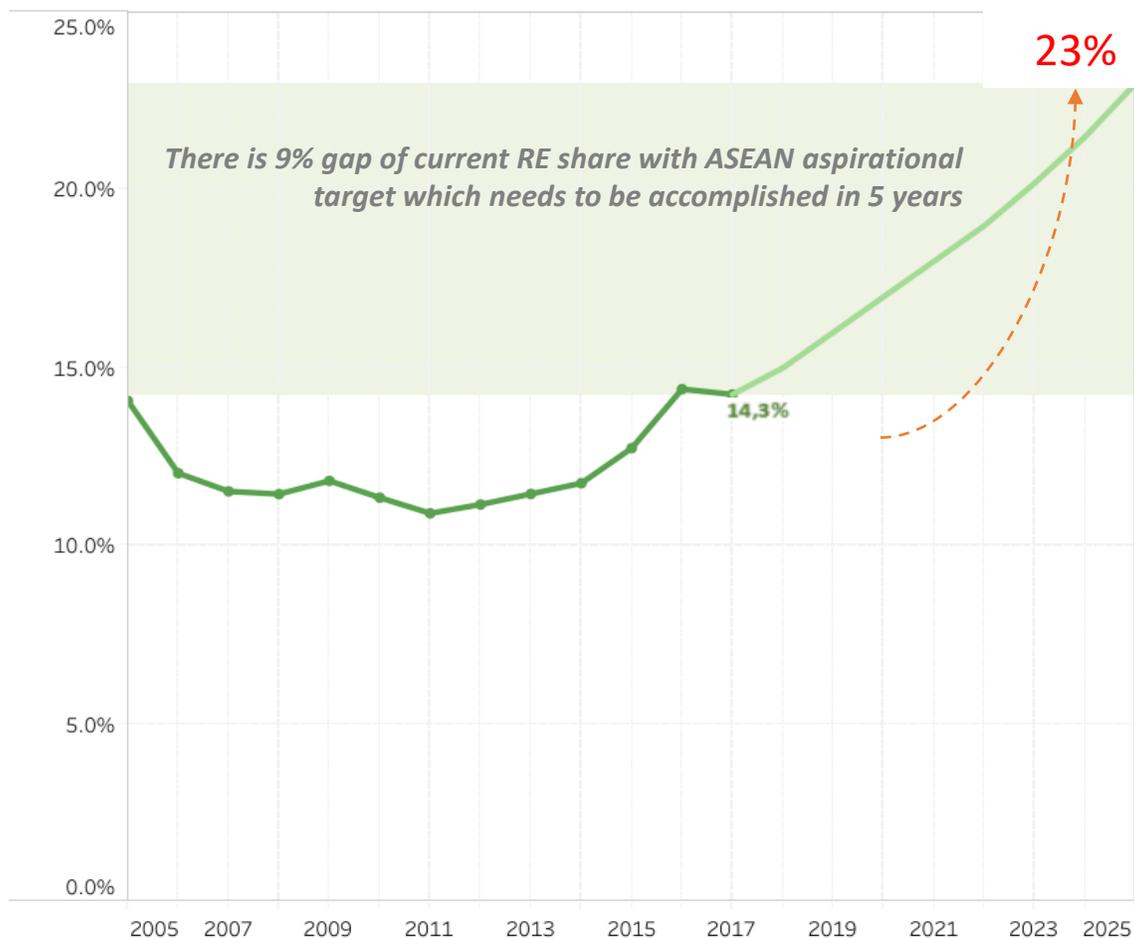
- AMEM37 (Sep 2019) discussed on **“Global Energy Transformation: A path to sustainability for Southeast Asia”**
- AMEM expressed the need to (i) identify potential RE in ASEAN, (ii) provide recommendations on RE technologies and job opportunities, and (iii) insights on a competitive RE target for the region and **how to achieve the ASEAN RE target.**



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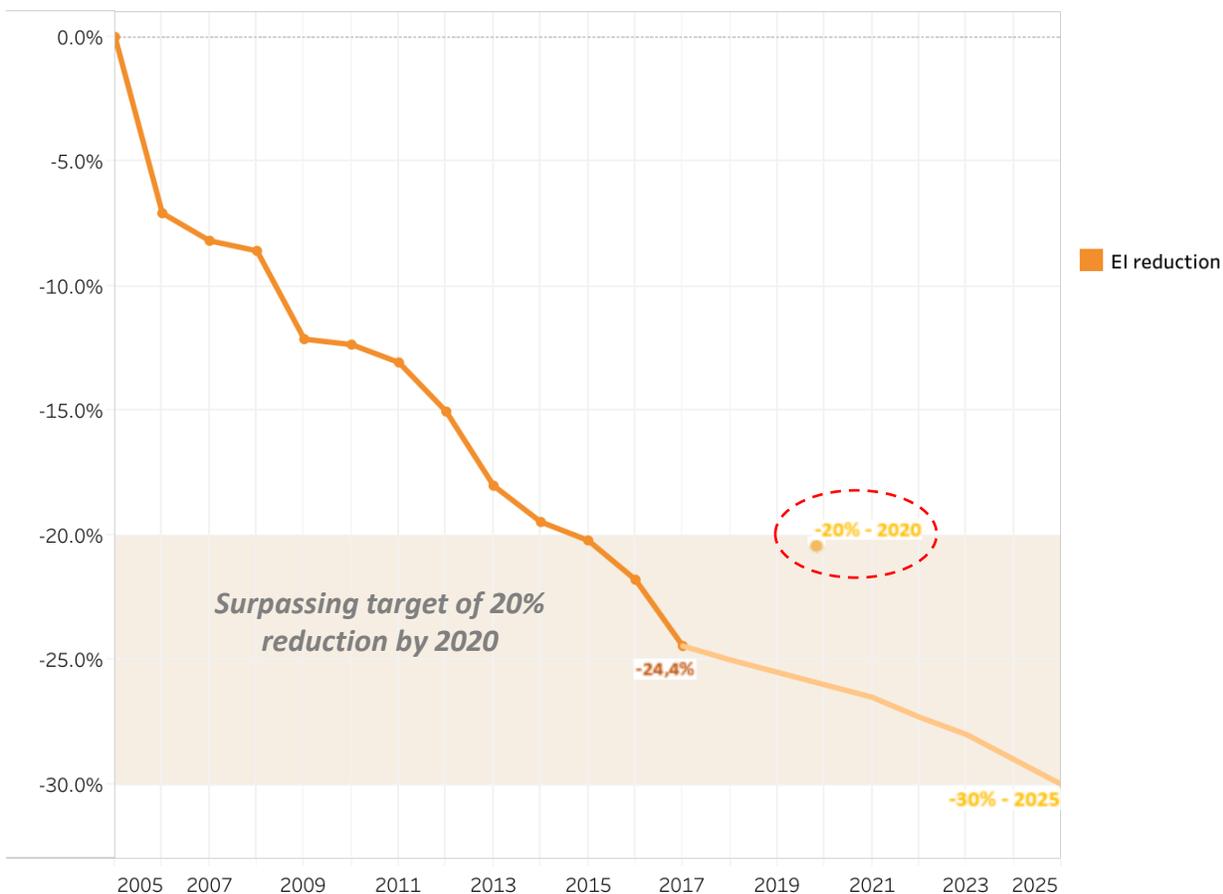
# Progress and achievements of ASEAN Energy targets

### ASEAN Renewable Energy (RE) Share in TPES (%)



Renewable energy include biofuel, biomass, geothermal, solar, waste, wind.  
RE Share in TPES target by 2025 is 23% according to APAEC 2016-2025.

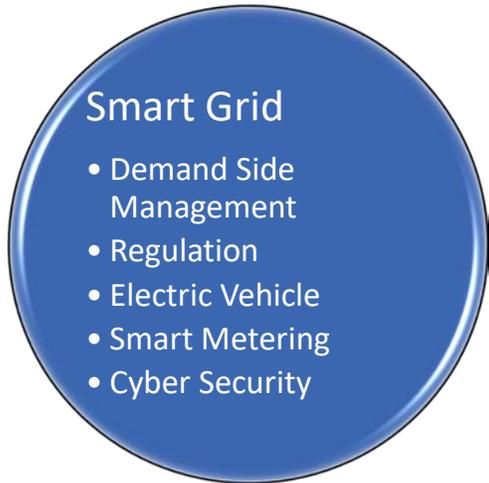
### ASEAN Energy Intensity (EI) Reduction in TPES from 2005 level



Energy Intensity (EI) reduction in TPES target by 2025 is -30% according to APAEC 2016-2025.

# Future Technologies in Energy Transition

## Smart Grid Concept

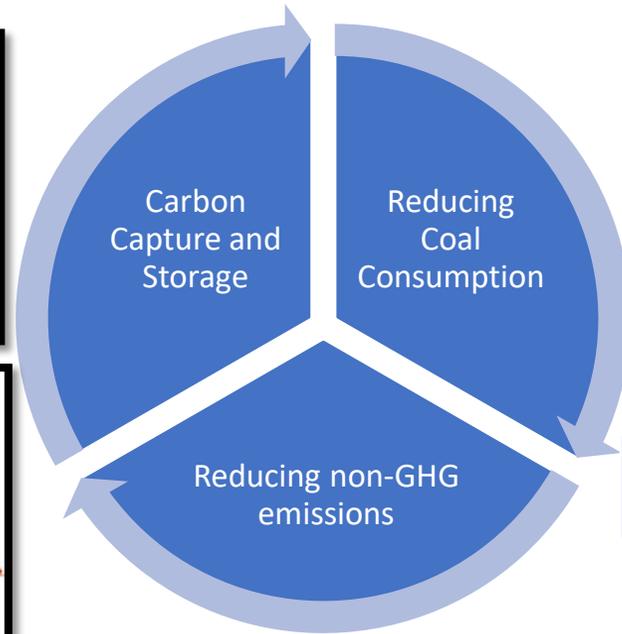
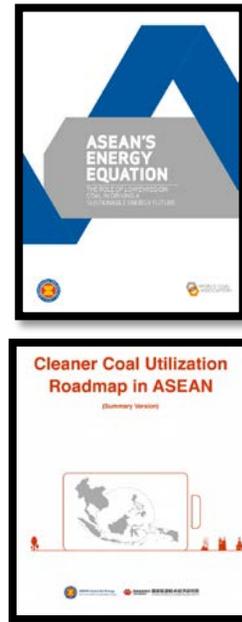


ACE-ISGF Initiative Programme (5 Years)

Activities:

- 1) Policy and Regulatory Workshops for Demand Side Management
- 2) Developing Country Roadmap for EV and Smart Grid
- 3) Capacity Building about Smart Metering and EV

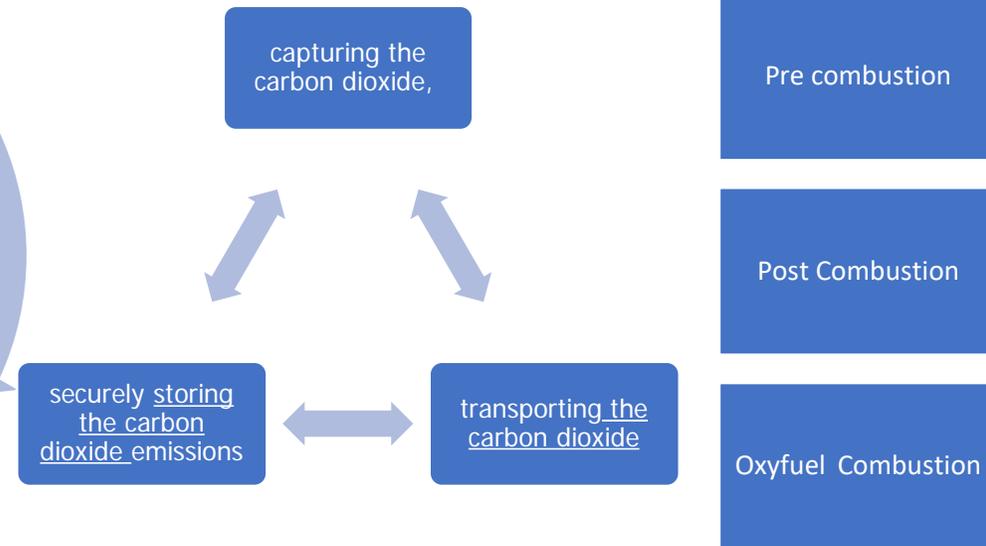
## CCT in Power Generation



ACE Activities in supporting the CCT technologies:

- 1) HELE Technology Study with WCA (figure above to access click it)
- 2) ACE-CETERI Clean Coal Technology Roadmap for ASEAN (figure below, to access click it)
- 3) JCOAL-ACE studies in ASEAN CCT ([MoU sign](#))

## CCS Concept



ACE's Initiatives for CCS

Early Communication:

- 1) CO2 sequestration - Exxonmobile
- 2) Methane Reduction – Carbon Connect International

CEFIA

# Government/Public-Private Partnership towards energy transition in ASEAN



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## ASEAN +3 Community



Recommendation on Policy, Projects, Partnership, Investment (PPPI) (Affordable, Cleaner, Sustainable option)

Linchpin to advance technology deployment through Public-Private Partnership

Development Partners and Private Sectors



Development Partners and Private Sectors

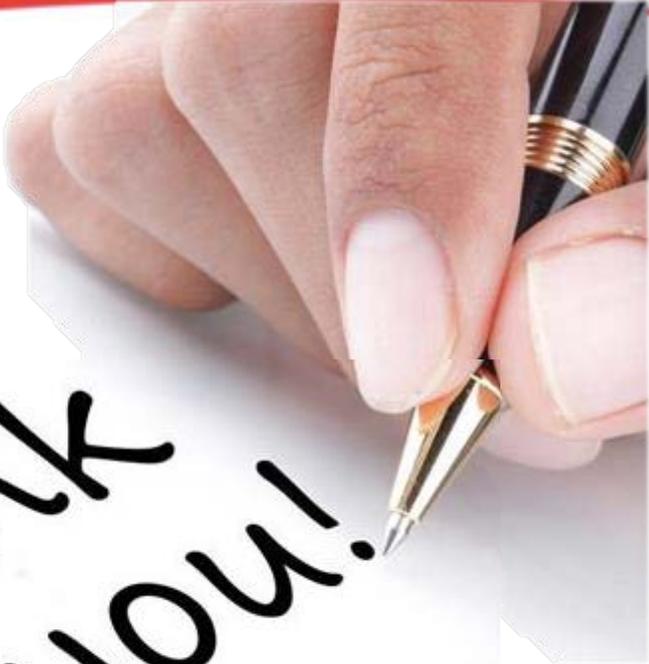


Knowledge Transfer and Incubator for new technology and R&D enhancement

Benefits of Strong Partnership:

- Efficiency in Economy, Market, and Policy
- Leapfrogging Opportunities
- Introducing new technologies and innovations
- Enhancing Investment and Financing

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Thank you!

A close-up photograph of a hand holding a black and gold pen, writing the words "Thank you!" in a cursive script on a white piece of paper. The paper is slightly tilted. The background of the entire slide features three thick, curved lines in blue, yellow, and red, which are the colors of the ASEAN flag.

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