



ASEAN Decarbonisation Targets, Progress, and Initiatives Focusing on Renewable Energy and Energy Efficiency under the APAEC Framework

7th CEFIA Forum

Kobe, Japan

13 February 2025

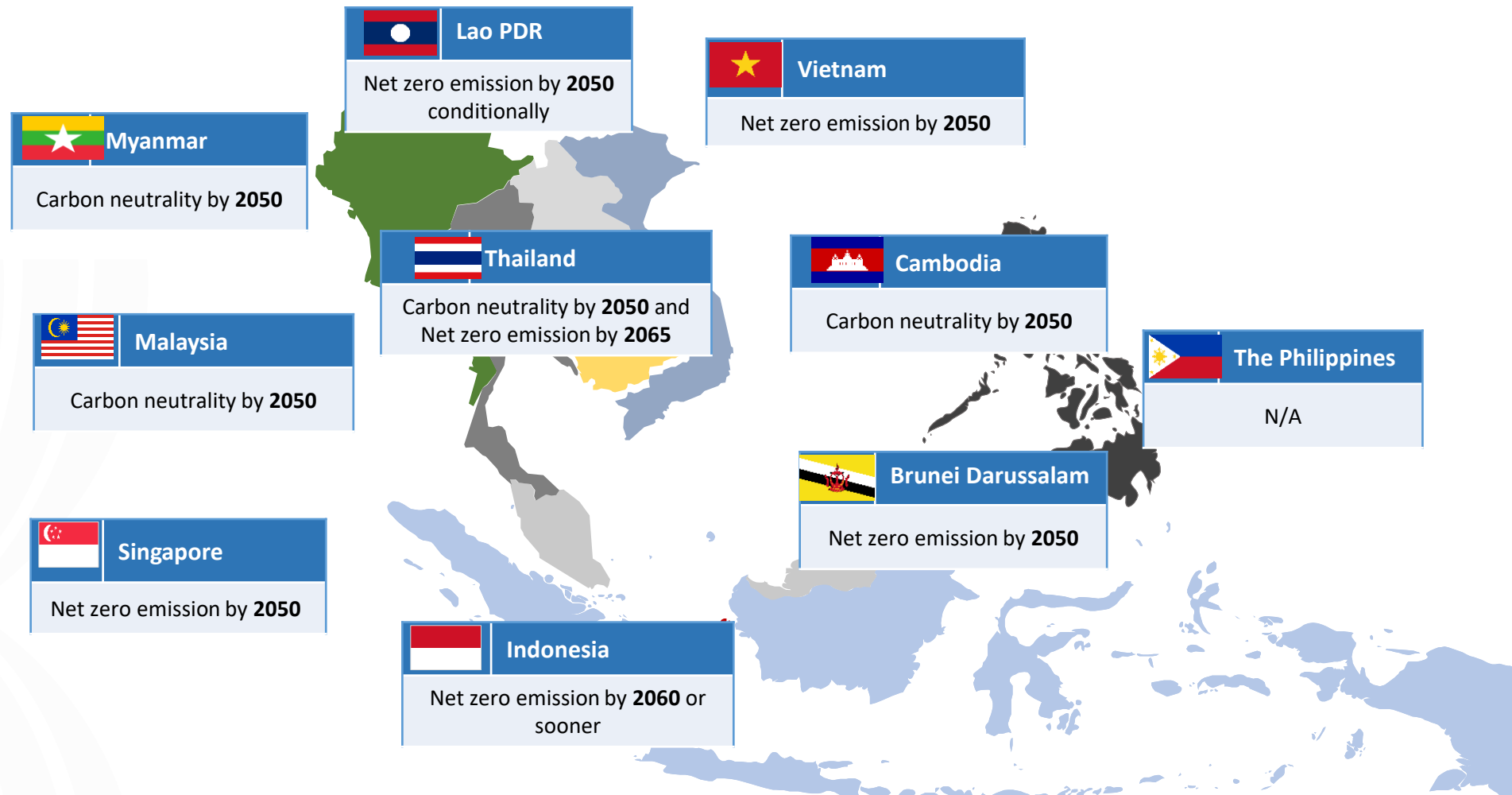
Presented by:

Mardika Firlina

Associate Officer, Energy Efficiency and Conservation (CEE) Department

ASEAN Centre for Energy








ASEAN Carbon Neutrality or Net Zero Target



The majority of the 10 ASEAN Member States have set carbon neutrality or net zero targets by 2050

CEFIA's Support to APAEC Phase II: 2021-2025



Focus	Program Area & Key Strategy
	ASEAN Power Grid: Expand MPT, Grid resiliency and clean & renewable energy integration
	Trans ASEAN Gas Pipeline : Develop Common Gas Market by LNG connectivity and accessibility
	Clean Coal Utilization: Optimize the role of Clean Coal in energy transition
	Energy Efficiency: Reduce energy intensity by 32% in 2025 based on 2005 level
	Renewable Energy: Achieve 23% share of RE in ASEAN energy mix and 35% share of RE in ASEAN installed Capacity
	Regional Energy Policy and Planning: Advance energy policy and accelerate region's energy transition & resilience
	Nuclear Energy: Build human resources capabilities on nuclear technology for power generation

Energy Efficiency

RENKEI

SteelEcosol

Air Conditioners

Zero Energy Building

Renewable Energy

Microgrid

Biochar

New

Hydrogen

New

Green Ammonia

Cross-Cutting Areas

Finance

Visualization of GHG Emission Reductions

Cleantech Innovation & Entrepreneurship for MSMEs & Start-ups (ASEAN Accelerator)

New

CEFIA Support APAEC Program Area for Energy Efficiency and Renewable Energy

Overview Regional Activities on Air Conditioners



Regional Activity in 2024



The ASEAN region has set a target of achieving a Coefficient of System Performance (CSPF) of **6.09 for air conditioners by 2025**, based on the ASEAN Regional Policy Roadmap 2022-2025

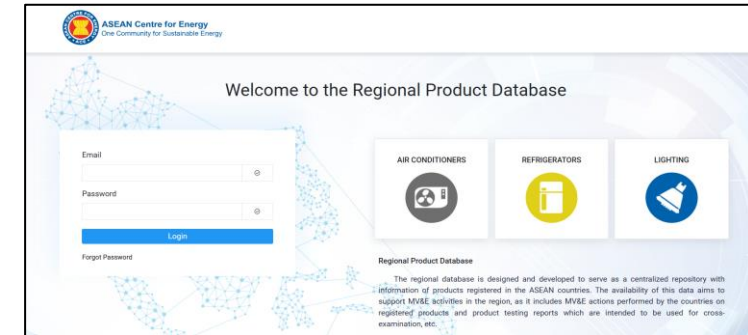
Provide Assistance with Technical Reports and Study

Regional Capacity Building Workshop & Webinars



Activities Planned for 2025

Develop ASEAN Regional Product Database for AC



Website: <https://prs.aseanenergy.org/>

Publish Technical Report

- Monitoring, Verification and Enforcement (MVE) Guidelines for Air Conditioners
- Green Public Procurement Guidelines for Air Conditioners

Potential Regional Collaboration

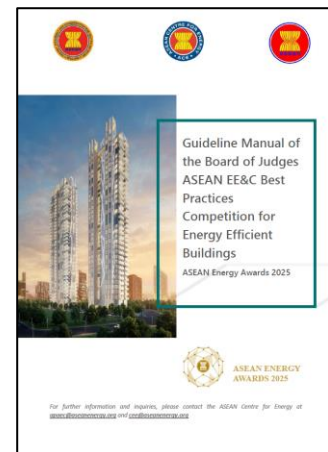
Conduct site visits to industry and testing laboratories for air conditioners and develop related studies and reports

Overview Regional Activities on Zero Energy Building (ZEB)



Regional Activity in 2024

Promote ZEB through ASEAN Energy Awards (AEA)



ZEB was added as part of the special submission subcategory of Energy Efficient Buildings in 2019



16 Winners
(2019 – 2024)

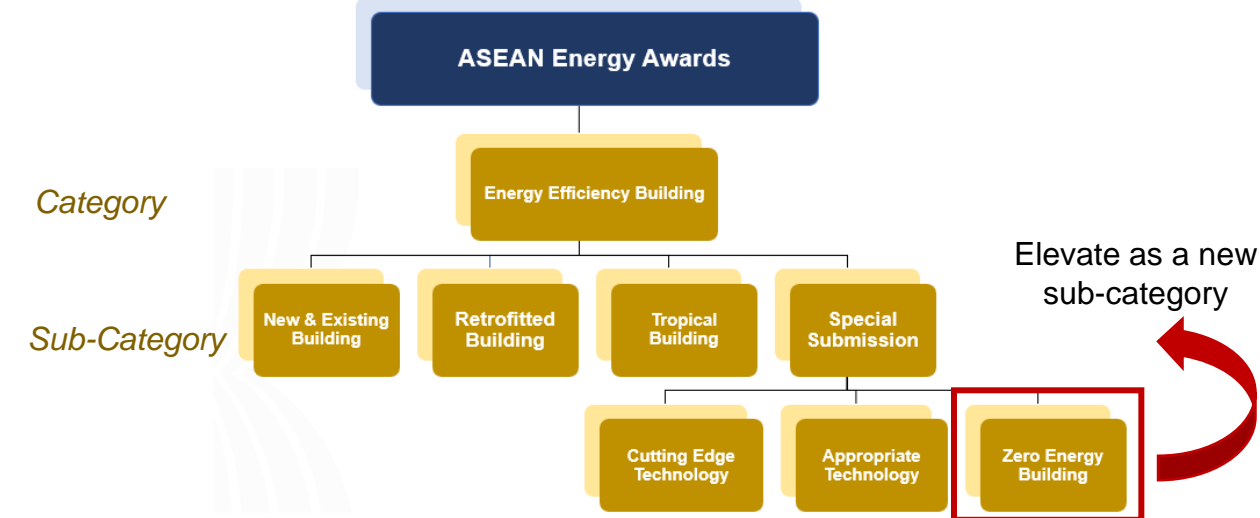
Capacity Building and Policy Consultation



Activities Planned for 2025

Publish a Policy Brief: Zero Energy Buildings (ZEB)

Propose to the AEA Board of Judges the elevation of ZEB as a new sub-category in the ASEAN Energy Awards



Potential Regional Collaboration

Pilot project to promote ZEB, capacity building workshops for developing ZEB policies in ASEAN, and develop related studies and reports

Overview Regional Activities on Steel Industry



Regional Activity in 2024

Online Webinar with ASEAN Japan Steel Initiative (AJSI)



AJSI Webinar 2024
Achieving Carbon Neutrality in the Steel Sector

6th Feb 2024 via ZOOM

12:00 – 4:10 pm Myanmar time
12:30 – 4:40 pm Indonesia, Thailand & Vietnam time
1:30 – 5:40 pm Malaysia, Philippines & Singapore time
2:30 – 6:40 pm Japan time

Register online for free
Deadline | 30th Jan 2024
Limited! Only for 500 entrants

Click

6th February 2024 via Zoom Webinar
12.30 - 4:40 (GTM+7)

Register:

*This event is supported by the ASEAN Centre for Energy
For more information, you can visit: <https://www.cefia-dp.go.jp/>

Potential Regional Collaboration

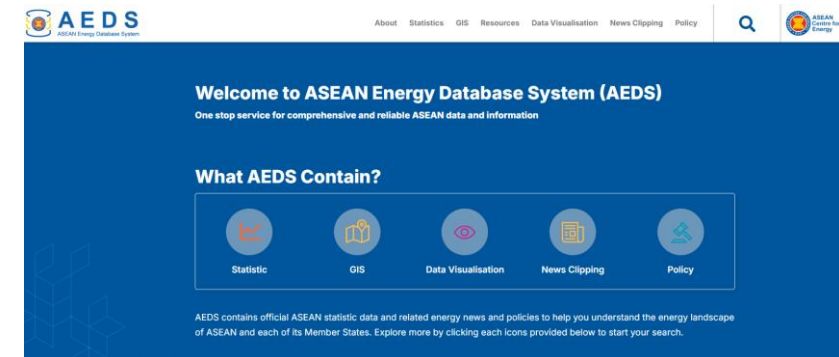
Capacity building to disseminate efficient technologies for steel industries and develop related studies and reports

Activities Planned for 2025

Publish Net Zero Roadmaps for the Steel Industry in Indonesia and Vietnam

Highlighting the techno-economic feasibility study for a commercial green H₂-ready direct reduced iron (DRI) ironmaking plant

Launching ASEAN Industrial Energy Efficiency Database, integrated into the ASEAN Energy Database System (AEDS)



AEDS
ASEAN Energy Database System

About Statistics GIS Resources Data Visualisation News Clipping Policy

Welcome to ASEAN Energy Database System (AEDS)
One stop service for comprehensive and reliable ASEAN data and information

What AEDS Contain?

- Statistic
- GIS
- Data Visualisation
- News Clipping
- Policy

AEDS contains official ASEAN statistic data and related energy news and policies to help you understand the energy landscape of ASEAN and each of its Member States. Explore more by clicking each icons provided below to start your search.

<https://aseanenergy.org/aeds/>

Overview Regional Activities on Bioenergy/Biofuel



Regional Activity in 2024

[Annual] Submissions of Biofuel-related Projects for ASEAN RE Project Awards Submission

[On-Going] Study on Biofuel Market Potential for Regional Cooperation in ASEAN – with ERIA

→ Will be published in May 2025

Identified Early Bioenergy with Carbon Capture and Storage (BECCS) Development in ASEAN

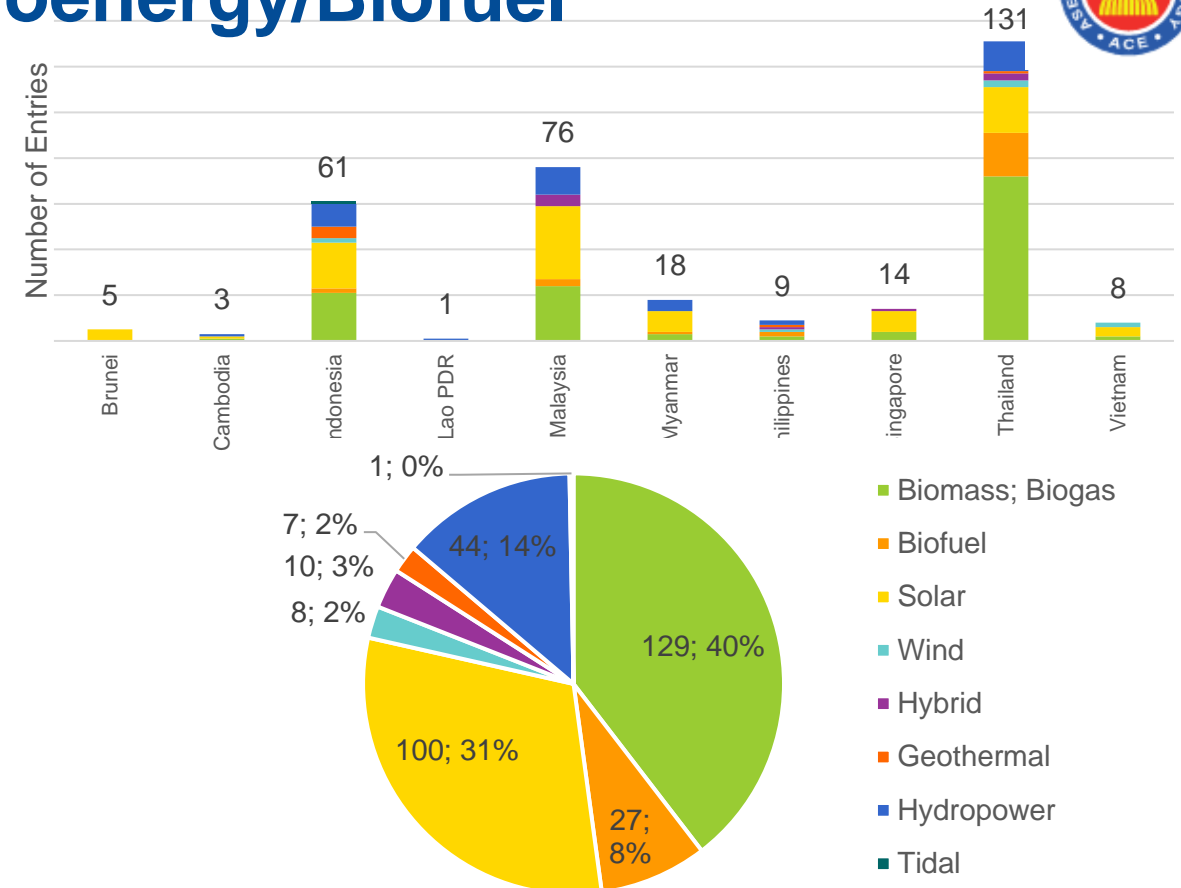
[On-Going] Identification of Bioenergy Potential Role in ASEAN Renewable Energy Long-term Roadmap

→ Will be published in AMEM 2025

Activities Planned for 2025

Conduct information sharing on biofuel and bioenergy for power generation and transport

Promote biofuels and bioenergy at the side event of the ASEAN Energy Business Forum (AEBF)



Potential Regional Collaboration

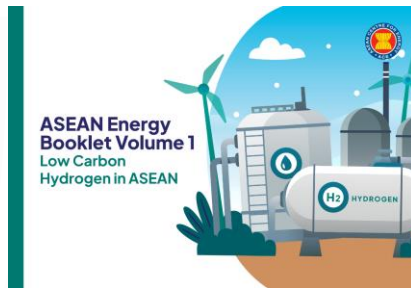
Develop a study or conduct capacity-building activities to explore the potential of Bioenergy with Carbon Capture and Storage (BECCS) in the industry or Biomass co-firing for power generation sector

Overview Regional Activities on Hydrogen and Ammonia

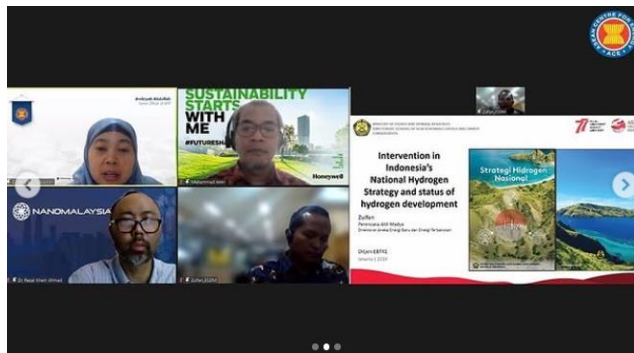


Regional Activity in 2024

Published ASEAN Energy Booklet Volume 1: Low Carbon Hydrogen in ASEAN and Policy Brief



Online Webinars to Promote Low Carbon Hydrogen



Activities Planned for 2025

Publish Study on Hydrogen and Ammonia



Overview of global H₂/NH₃ technology development, status and trends



Perspective of each AMS in H₂/NH₃



Demand and supply status of H₂/NH₃ in various sectors in each AMS



Analysis of the role of H₂/NH₃ in decarbonising ASEAN's energy sector

Potential Regional Collaboration

Engage with industry and the private sector to establish an ASEAN hydrogen alliance and develop standards for hydrogen and ammonia handling

Suggestions for CEFIA and Its Flagship Project



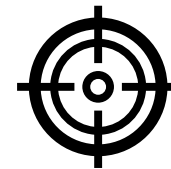
Expanding the scope of all CEFIA flagship projects activities from the **national level to the regional level**



Providing technical assistance through **reports and studies** with case studies applicable to all ASEAN countries



Providing more **capacity-building activities** (in-person or online) to disseminate and promote the technology, ensuring participation from all ASEAN Member States



Expanding flagship projects to address **key challenges** and **priorities** of all ASEAN Member States



ASEAN Centre for Energy
One Community for Sustainable Energy

To know more about the latest ACE Publications,
those are available for download from:

aseanenergy.org/publications



For further information or to provide feedback, please contact ACE at
secretariat@aseanenergy.org



ASEAN Centre for Energy



@aseanenergy



ASEAN Centre for Energy



@aseanenergy



ASEAN Centre for Energy

Thank You