



Setting the Scene

8th Government–Private Forum on the Cleaner Energy Future Initiative for ASEAN (CEFIA)

Kuala Lumpur, Malaysia

17 October 2025

ASEAN Plan of Action for Energy Cooperation (APAEC) and Strategic Partnership Department
ASEAN Centre for Energy

Agenda

- Review of 7th CEFIA Forum
- Direction from 22nd AMEM+3
- APAEC Phase II: 2021-2025 Implementation Progress
- The APAEC 2026 – 2030

Review of 7th CEFIA Forum



Overview

- 13 – 14 February 2025, first time in Kobe, Japan
- Organized by: METI (Japan), ACE, BCG
- Attended by 10 AMS (9 AMS in-person and online from Singapore) representing the EE&C-SSN and RE-SSN

Highlights

- Shared the APAEC Phase II implementation progress.
- Discussions about flagship projects, decarbonization technologies and initiatives, cross-cutting projects, best practices for financial instruments and de-risking mechanisms.
- Introduction of new flagship projects in hydrogen & ammonia
- AMS presented related national targets, together with ongoing initiatives in the areas of RE and EE&C.
- AMS shared feedback on possible activity topics: emerging technologies in energy management, power generation & transmission, renewable energy, standard harmonizations, decarbonization in supply & demand sides, financial mechanisms, fuel alternative.

Publication

- ACE published CEFIA Zero Energy Building (ZEB) Report on 17 July 2025
[Zero Energy Buildings \(ZEB\) in ASEAN - ASEAN Centre for Energy](#)



22nd AMEM+3: Comments and outcomes



- About APAEC
 - Acknowledged the remarkable progress in implementing the current ASEAN Plan of Action for Energy Cooperation (APAEC) 2016-2025 Phase II: 2021–2025 and appreciated the Plus Three Countries' invaluable support over the past five-year.
 - Welcomed the endorsement of the new APAEC 2026-2030 with the theme, “Advancing Regional Cooperation in Ensuring Energy Security and Accelerating Decarbonisation for a Just and Inclusive Energy Transition”.
- About CEFIA
 - Expressed appreciation for the deepening of cooperation between ACE and the Ministry of Economy, Trade and Industry (METI) of Japan and the resulting successful convening of the 7th Government–Private Forum on the Cleaner Energy Future Initiative for ASEAN (CEFIA), held on 13–14 February 2025 in Kobe, Japan, and 8th Government-Private Forum on the CEFIA convened on the sidelines of the ASEAN Energy Business Forum (AEBF) on 17 October 2025 in Kuala Lumpur, Malaysia
 - Recognised significant progress achieved through CEFIA’s flagship projects and highlighted the growing engagement of the private sector in advancing decarbonisation technologies and initiatives.
 - Underscored the critical role of CEFIA for mobilising transition financing and further encouraged both public and private sector business model in energy transition projects.
 - Recognised the importance of continued and substantive contributions of CEFIA and its flagship projects in support of the implementation of the APAEC 2026–2030, thereby fostering a cohesive and integrated approach to advancing ASEAN’s clean energy objectives.
 - Appreciated the CN diagnosis action plan development undertaken in AMS in identifying country-specific CN policy measures, challenges and opportunities for energy transition and Zero Energy Building (ZEB) promotion in the industrial and building sectors, thereby supporting ASEAN’s transition towards a low-carbon energy future.

22nd AMEM+3: Comments and outcomes



- About ASEAN + 3:
 - ❖ Recognised the crucial role of the Plus Three countries in supporting the implementation of the new APAEC strategies and the importance of collective actions to accelerate the energy transition while ensuring energy security and resilience.
 - ❖ Reaffirmed its commitment to foster innovation, mobilise finance, and strengthen regional interconnectivity as key enablers for achieving a low-carbon economy.
 - ❖ In light of intensifying global geopolitical dynamics, rising energy demand, and rapid advancements in digitalisation and emerging technologies, the Meeting stressed the need further to enhance collaboration between ASEAN and the Plus Three countries to ensure long-term stability, economic competitiveness, and sustainable development in the region.
 - ❖ Emphasised the necessity of prioritising EE&C efforts in the high-energy consuming industrial and transport sectors and requested continued support and best-practice sharing from the ASEAN+3 Countries to facilitate this transition, in line with the enhanced target and strategies under the new APAEC.

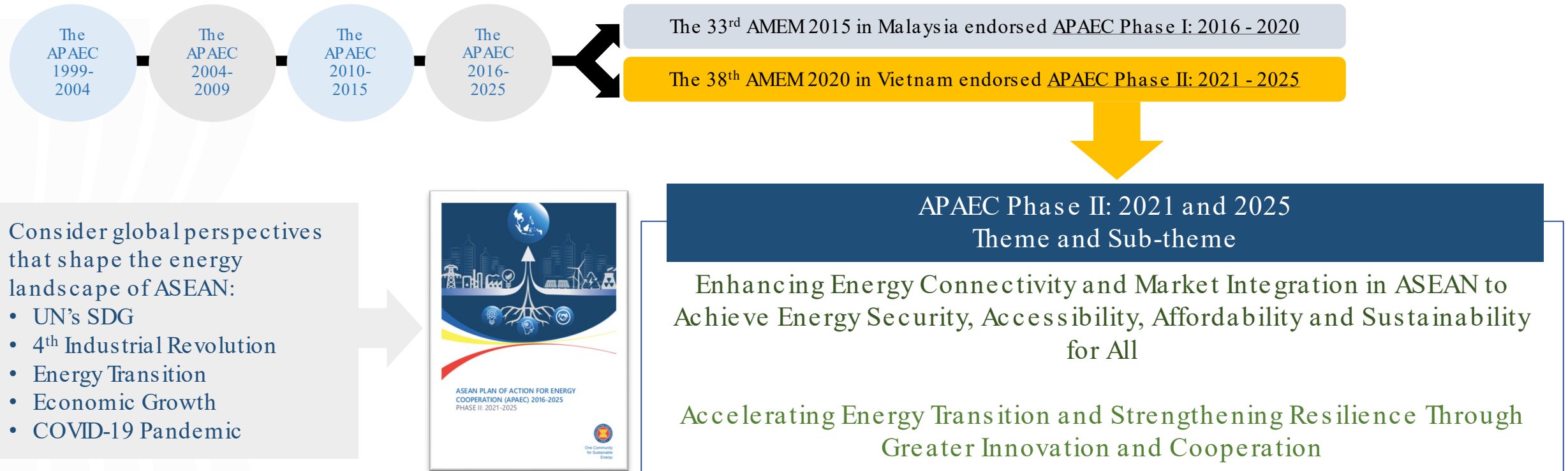


APAEC Phase II: 2021- 2025 Implementation Progress

ASEAN Plan of Action for Energy Cooperation (APAEC)



The ASEAN Plan of Action for Energy Cooperation (APAEC) is a regional blueprint documents that aims to promote multilateral energy cooperation and integration to attain the goals of the ASEAN Economic Community (AEC). It serves as the platform for deeper cooperation both within ASEAN as well as with Dialogue Partners (DPs) and International Organisations (IOs) towards enhancing energy security, accessibility, affordability, and sustainability within the framework of the AEC.



The APAEC Phase II: 2021-2025 consists of seven programme areas, reflecting the focus and interests of the region on energy cooperation



1. ASEAN Power Grid (APG)

To expand **regional multilateral electricity trading**, strengthen **grid resilience and modernisation**, and promote **clean and renewable energy integration**.



5. Renewable Energy (RE)

To increase the share of RE to **23% in TPES** and **35% in installed power capacity by 2025**



2. Trans-ASEAN Gas Pipeline (TAGP)

To pursue the **development of a common gas market for ASEAN** by enhancing gas and LNG connectivity and accessibility.



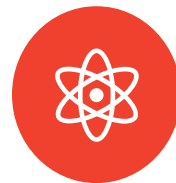
6. Regional Energy Policy and Planning (REPP)

To **advance energy policy and planning** to accelerate the region's energy transition and resilience



3. Clean coal technology (CCT)

To optimise **the role of CCT in facilitating the transition** towards sustainable and lower emission development.



7. Civilian Nuclear Energy (CNE)

To **build human resource capabilities** on nuclear science and technology for power generation.



4. Energy Efficiency and Conservation (EEC)

To **reduce energy intensity by 32% by 2025** and encourage EEC efforts, especially in the sector of transport and industry,

Key Achievements of APAEC Phase II: 2021-2025

Incremental progress, substantial efforts and cooperation are needed to achieve regional goals by 2025



4.5 out of 5

Overall Scorecard of
APAEC Phase II: 2021-
2025 by September 2025

4.8 Projected by end
of 2025



APG

9 out of 18

Bilateral interconnections

LTMS-PIP

Commenced in 2022



TAGP

58.7 MTPA

Regasification capacity in
15 terminals

13

Cross-border
Pipelines in 6 AMS



CCT

18 GW

CCT(SC & USC) installed
power capacity and 13
coal-biomass co-firing
plants.



EE&C

25.5%

Energy intensity
reduction as of 2023
based on 2005 levels



RE

14%

RE Share in TPES in 2023

33.5%

RE share in installed
power Capacity in 2023



REPP

SOME-ADB

SOME-EU

Established in 2023

8th AEO

Published in 2024



CNE

400

Policy maker trained
from 7 regional nuclear
capacity building
programme



The APAEC 2026 - 2030

APAEC 2026-2030 Framework and Content



ASEAN Community Vision 2045:
Resilient, Innovative, Dynamic, and People-centred ASEAN

ASEAN Economic Community (AEC) Strategic Plans 2026-2030 (published)

ASEAN Energy Future 2045
Guided by 20-year Theme/Vision: *Secure, Resilient, and Interconnected Low-Carbon ASEAN Energy Future*
(adopted during Special SOME 2025)

APAEC 2026-2030
Guided by 5-year Theme: Advancing Regional Cooperation in Ensuring Energy Security and Accelerating Decarbonisation for A Just and Inclusive Energy Transition (adopted during 42nd AMEM)

Aspirational Targets

RE Share in TPES (tbc)	EI reduction (tbc)
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Programme Areas of APAEC						
PA 1. ASEAN Power Grid	PA 2. Oil & Gas Connectivity, Security and Sustainability	PA 3. Clean Coal Transformation	PA 4. Energy Efficiency & Conservation	PA 5. Renewable Energy	PA 6. Regional Energy Policy and Planning	PA 7. Civilian Nuclear Energy
Key Strategy	Key Strategy	Key Strategy	Key Strategy	Key Strategy	Key Strategy	Key Strategy
Outcome based Strategies	Outcome based Strategies	Outcome based Strategies	Outcome based Strategies	Outcome based Strategies	Outcome based Strategies	Outcome based Strategies
Action Plans	Action Plans	Action Plans	Action Plans	Action Plans	Action Plans	Action Plans
Annual Activities	Annual Activities	Annual Activities	Annual Activities	Annual Activities	Annual Activities	Annual Activities
Supportive Indicators	Supportive Indicators	Supportive Indicators	Supportive Indicators	Supportive Indicators	Supportive Indicators	Supportive Indicators

Main content of APAEC 2026-2030
Document for public (to be endorsed by AMEM in Oct 2025)

To be identified in separate supporting document, upon agreement in each SEB/SSN level (not for public)

Background

APAEC Drafting Committee Meetings and Consultations has been conducted throughout Jan 2024 – Aug 2025, with total 6 ADC Meetings has been completed including several additional consultation sessions within SEB/SSN as well as consultations with external experts and partners



Key Highlights of APAEC 2026 – 2030

20-year theme	Secured, Resilient and Interconencted Low-Carbon ASEAN Energy Future (adopted during Special SOME 2025)
5-year theme	Advancing Regional Cooperation in Ensuring Energy Security and Accelerating Decarbonisation for a Just and Inclusive Energy Transition (adopted during 42 nd AMEM in 2024)
APAEC Aspirational Targets	• 30% RE Share in TPES by 2030 • 45% RE Share in Installed Power Capacity by 2030 • 40% EI Reduction in TPES (based on 2005 level) by 2030

[ASEAN Plan of Action for Energy Cooperation \(APAEC\) 2026-2030 - ASEAN Centre for Energy](#)

APAEC 2026-2030 Key Strategies across Programme Areas



1. ASEAN Power Grid (APG)

Strengthen APG planning and implementation to enhance regional energy security and connectivity, through infrastructure development, advancing market frameworks, and a coordinated regional cooperation framework



2. Oil and Gas Connectivity, Security, and Sustainability

Enhance energy connectivity, energy security measures and accessibility in sustainable practices within the oil and gas sectors in order to meet regional energy demands responsibly



3. Clean Coal Transformation

Promote a responsible and cleaner coal value chain that aligns with carbon neutrality goals and development



4. Energy Efficiency and Conservation (EEC)

Enhance the adoption of EE&C for decarbonising end-use sectors through emerging innovative solutions, enhanced regional cooperation, and policy and standards harmonisation



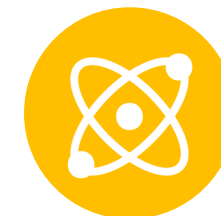
5. Renewable Energy (RE)

Accelerate the scale-up of RE deployment on power system transition, energy supply and end-use sectors towards a low-carbon ASEAN vision and across the ASEAN countries



6. Regional Energy Policy and Planning (REPP)

Strengthen regional energy policy, planning and interconnectivity to accelerate a just and inclusive low-carbon energy transition



7. Civilian Nuclear Energy (CNE)

Equip decision-makers with critical insights to position CNE as a low carbon fuel option for ASEAN's growing energy demand



APAEC 2026-2030 Outcome-based Strategies



Outcome-based Strategies	APG	OGCSS	CCTR	EE&C	RE	REPP	CNE
	Strengthen APG bodies' capacity and coordination	Enhance role of TAGP	Advance responsible coal value chain	Increase the adoption of energy efficient appliances and equipment	Accelerate RE deployment for low carbon future	Advance ASEAN's energy profile	Promote role of nuclear energy
	Enhance APG Planning and Infrastructure	Strengthen regional collaboration in O&G sector	Pave the pathway for coal in ASEAN's Carbon Neutrality	Accelerate EE&C adoption in Building Sector	Accelerate RE integration for ASEAN's power sector	Bridge financial and investment gaps for ASEAN's energy transition	Enhance effective communication strategies for CNE
	Expand Cross Border Power Trading	Pursue Green Diversification and Decarbonisation in O&G sector		Enhance EE&C in industry and agricultural sectors	Advance RE applications in end-use sectors (transport, industry and building)	Advance cross-sectoral collaboration for a just and inclusive energy transition	Strengthen regional and international collaboration for nuclear energy
	Drive a low carbon APG			Enhance fuel economies in transport sector		Effective Implementation of APAEC	
				Promote innovative strategies for the adoption of EE technologies and measures			

Acknowledgement of CEFlA Forum among important platforms for activity achievement for APAEC Phase II: 2021 - 2025



“... Participation of the private sector through business forums and matchmaking for EE&C projects occurs via platforms such as the Cleaner Energy Future Initiative for ASEAN (CEFlA) Forum, facilitating dialogue among policymakers, financiers and practitioners, fostering investment and business growth in clean energy projects...”

PROGRAMME AREA 4: ENERGY EFFICIENCY AND CONSERVATION (EE&C)

Background

EE&C is being increasingly recognised in ASEAN as the “first fuel” in accelerating the energy transition. It serves as the most cost-effective, reliable and immediately actionable solutions that reduce energy demand, lower emissions and enhance energy security while supporting ASEAN’s long-term sustainability goals. With ASEAN’s energy demand projected to more than double by 2050, scaling up efficiency measures across buildings, appliances, transport, and industry sectors will be indispensable to ensuring a just and sustainable energy transition.

In leading this programme area, the Energy Efficiency and Conservation Sub-Sector Network (EE&C-SSN) plays a strategic role in the alignment of energy efficiency efforts in the ASEAN region. Aiming to achieve the aspirational target to reduce EI (based on TPES) by 40% by 2030 through the APAEC, the EE&C-SSN supports the coordination and execution of energy efficiency and conservation programmes by creating networks, organising forums, conferences and seminars, and promoting new initiatives and knowledge-sharing with DPs and IOs, the private sector, and financial institutions, to achieve decarbonisation across end-use sectors.

Key Achievements in APAEC 2016-2025 Phase II: 2021-2025

Several key achievements have been made under the EE&C Programme, particularly in efforts to expand, harmonise and promote energy efficiency standards, and also to label energy-related products across ASEAN.

Notable progress includes the advancing a more stringent minimum energy performance standards (MEPS) for air conditioner, as well as the initiation of MEPS harmonisation effort for lighting and refrigerator. These are supported by strengthened monitoring, verification and enforcement (MVE) initiatives, including the establishment of product registration databases as well as round-robin testing for air conditioner and lighting infrastructures. To promote regional integration, the Energy Efficiency Mutual Recognition Agreement (EE MRA) Standards have been advanced to facilitate the movement of energy-efficient products across ASEAN markets. Another key initiatives include the annual ASEAN EE&C Awards, which comprise the ASEAN Best Practices for Energy Efficient Building (EEB) Awards, Green Building (GB) Awards and Energy Management for Building and Industry Awards. Between 2020 and 2025, the Awards received over 300 entries, with around 175 awardees recognised during this five-year period.

ASEAN has made significant strides in enhancing the participation of the private sector and financial institutions, particularly Energy Service Companies (ESCOs) and industry clusters in promoting EE&C. Participation of the private sector through business forums and matchmaking for EE&C projects occurs via platforms such as the Cleaner Energy Future Initiative for ASEAN (CEFlA) Forum, facilitating dialogue among policymakers, financiers and practitioners, fostering investment and business growth in clean energy projects. Additionally, the Sustainable ASEAN Energy Management Certification Scheme (SAEMAS) were implemented, supporting the formulation of sustainable energy management system in the region.



ASEAN Plan of Action for Energy Cooperation (APAEC) 2026-2030 35

Source: ASEAN Plan of Action for Energy Cooperation 2026 – 2030 (2025)

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Thank you