



**JOINT MINISTERIAL STATEMENT
OF THE 40th ASEAN MINISTERS ON ENERGY MEETING**
15 September 2022

1. The 40th ASEAN Ministers on Energy Meeting (AMEM) was hosted virtually by Cambodia on 15 September 2022. H.E. Suy Sem, Minister of Mines and Energy of Cambodia, chaired the Meeting. H.E. Arifin Tasrif, Minister of Energy and Mineral Resources of Indonesia was the Vice Chair. The Dialogues with the Heads of the International Energy Agency (IEA) and the International Renewable Energy Agency (IRENA) were conducted in conjunction with the 40th AMEM. The Deputy Secretary-General of ASEAN for ASEAN Economic Community was also in attendance.

2. The Joint Opening Ceremony for the 40th AMEM and the ASEAN Energy Business Forum (AEBF) 2022 was officiated by Samdech Akka Moha Sena Padei Techo Hun Sen, Prime Minister of the Kingdom of Cambodia and Chair of the 40th and 41st ASEAN Summit. In his opening address, the Prime Minister emphasised that ASEAN must focus on energy transition, which is a key task in promoting sustainable and resilient socio-economic recovery by promoting participation, strengthening cooperation and increasing attention to accelerating energy transition towards a realistic common prosperity.

3. The Prime Minister also looked forward to advance support to further strengthening the implementation of (i) the ASEAN Power Grid (APG) and Trans-ASEAN Gas Pipelines (TAGP) by accelerating remaining important works and achieving regional connectivity; (ii) policies, laws and regulations on clean energy, environmental protection and energy resource management to contribute to climate change mitigation and move towards future carbon neutrality; (iii) international cooperation to increase electricity trading, enhance mixed and complementary energy sources, exchange experiences and share new technologies, and increase access to financing; and (iv) active participation in achieving the ASEAN Plan of Action for Energy Cooperation (APAEC): 2021-2025. The Prime Minister also congratulated the excellent arrangement of the AEBF that provided opportunity for enhancing relationships and partnerships, as well as exchanging information, experiences and knowledge about energy trends and findings of new research to drive the energy sector forward.

ASEAN outlook and efforts towards energy security and energy transitions

4. The Meeting launched the '7th ASEAN Energy Outlook (AEO7)', the flagship ASEAN energy planning document that complements and helps guide the continuing implementation of the APAEC and outlines scenarios and potential pathways for achieving the long-term energy security and energy transition agenda envisioned by last year's

'Bandar Seri Begawan Joint Declaration of the 39th AMEM on Energy Security and Energy Transition'. The AEO7 will enable ASEAN to explore multiple future scenarios for the region's energy demand taking into consideration all fuels and technologies, as well as to monitor access and social impact, and, delve into options for strengthening ASEAN's energy resiliency and security through clean energy technologies for grid integration, the decarbonisation of fossil fuels, renewable energy, and industrial efficiency.

5. The Meeting also discussed the immediate challenges faced by the region as a net energy importer that aspires for a secure energy transition amidst global supply constraints and affordability issues, geopolitical tensions and the requirements for economic recovery, and the need for resources and local talent towards just energy transitions. The Meeting welcomed the parallel release of the '2nd ASEAN Renewable Energy Outlook: Towards Regional Energy Transition', a complementary document developed for ASEAN by IRENA focused on ASEAN's options for accelerating the deployment of renewables, end-user electrification, energy efficiency and conservation, and emerging low-carbon technologies, including hydrogen.

Progress in the implementation of APAEC Phase II programme areas

6. The Meeting was pleased with the progress in the implementation of APAEC Phase II: 2021-2025 and expressed appreciation to the Senior Officials, energy subsector networks, specialised energy bodies, the ASEAN Centre for Energy (ACE) and the ASEAN Secretariat for the strong implementation follow-up, despite the global health pandemic and related implementation constraints. The Meeting expressed similar appreciation to all Dialogue Partners and International Organisations (DP/IOs) for the deepening support for ASEAN energy cooperation while expressing openness to further develop new and mutually beneficial partnership arrangements.

7. On the **ASEAN Power Grid (APG)**, the Meeting appreciated the continuing initiatives to strengthen the region's power systems, the implementation of APG interconnection projects, and the work to advance multilateral power trading. The Meeting noted the discussion to extend the existing Memorandum of Understanding (MOU) on the APG, which would further support the efforts of the Heads of ASEAN Power Utilities and Authorities (HAPUA) to develop the region's power systems by enhancing the integration of grid infrastructure and to boost energy security by enabling flexibilities to share the region's resources through the dispatch of greater renewable energy into the grid.

8. The Meeting congratulated all parties involved in the Lao PDR–Thailand-Malaysia-Singapore Power Integration Project (LTMS-PIP) which successfully commenced on 23 June 2022. The Meeting noted that the project enabled the cross-border power trade of up to 100 MW of hydropower using existing interconnections, and serves as a pathfinder towards realising the broader APG vision of multilateral electricity trading beyond neighbouring countries in the region. The Meeting looked forward to similar efforts to support HAPUA initiatives on the APG and multilateral power trade (MPT) in the region, providing opportunity to tap on renewable energy resources in the region, allowing greater sharing of surplus capacity across the region, and contributing towards the region's economic development, energy resilience and security.

9. The Meeting looked forward to the progress of the ASEAN Interconnection Masterplan Study (AIMS) III Phase 3 to further develop the minimum requirements for multilateral market development, regulatory frameworks, and grid code and technical standards.

10. On the **Trans-ASEAN Gas Pipeline (TAGP)** programme area, the Meeting emphasised the importance of the continuing role of natural gas in a well-balanced and just energy transition, including the need to enhance the connectivity and accessibility of gas and liquefied natural gas (LNG) supplies and for the region to tap on its indigenous energy resources.

11. The Meeting recognised the continuing collaborative efforts in addressing volatilities caused by supply chain disruptions from the oil and gas markets. The Meeting noted the discussion to renew the ASEAN Petroleum Security Agreement and the MOU on the Trans ASEAN Gas Pipeline. The Meeting also noted the good progress in the development of new regasification terminals (RGTs) in the region, especially in Cambodia, Indonesia, Thailand, and Viet Nam, that will allow ASEAN to continue expanding the region's gas distribution networks.

12. The Meeting also noted the support for the inclusion of natural gas in the sustainable finance taxonomies developed by governments and transnational bodies, including in the ASEAN Sustainable Finance Taxonomy that is being developed by the ASEAN Taxonomy Board, which would be helpful in further developing natural gas supply and infrastructure in ASEAN to support the region's energy transition.

13. On **Coal and Clean Coal Technology (CCT)**, the Meeting acknowledged the continuing role of coal-based power in ASEAN's current power mix and called for stronger regional cooperation to address regional supply stability and security. The Meeting also called for enhancing regional coal trade to increase the resiliency and supply security of ASEAN Member States amidst the global energy supply disruptions.

14. The Meeting also highlighted the commitment to reduce emissions in ASEAN, for which CCT and Carbon Capture, Utilisation and Storage (CCUS) are inevitably required. The Meeting noted the plans to develop an ASEAN CCUS Deployment Framework and Roadmap, which will serve to identify action plans to achieve short, mid, and long-term regional targets to decarbonise the region's energy systems.

15. The Meeting acknowledged the outcomes of the ASEAN High-Level Policy Dialogue on Coal hosted by Malaysia on 10 August 2022, which recommended enhancing the critical role of sustainable coal trade and CCT/CCUS deployment to ensure ASEAN's energy security, economic growth, and a just energy transition towards low-carbon economy. The Meeting encouraged the ASEAN Forum on Coal (AFOC) and ACE to strengthen their role in facilitating the intra-ASEAN coal trade, advancing regional and international cooperation, and promoting the role of CCT and CCUS in strengthening resilience and facilitating transition towards low carbon economy.

16. The Meeting noted the hosting by Thailand of various initiatives, such as the 2nd ASEAN Coal Business Roundtable Dialogue, ASEAN Corporate Social Responsibility (CSR) Best Practices Dissemination Workshop, AFOC Workshop on CCUS Policy and Regulatory Framework, and the ACE-World Coal Association Workshop on CCT and CCUS Financing Workshop, as well as ongoing cooperation with DP/IOs in implementing the CCT programme area and reaffirmed commitment to work with partners to scale up deployment of CCT and CCUS as options for decarbonising the region's power sector. The Meeting noted that these efforts could be further boosted by the development of an adequate and supporting policy and regulatory framework.

17. The Meeting encouraged cross-sectoral cooperation to explore best practices and measures to accelerate deployment of CCT and CCUS, including on low carbon policy incentives, carbon neutrality action plan and roadmaps, regional open-source CO₂ transport and storage networks, and the establishment of regional carbon trading mechanisms.

18. On **Energy Efficiency and Conservation (EE&C)**, the Meeting welcomed the 23.8% energy intensity (EI) reduction achieved by ASEAN in 2020 (based on 2005 levels) and encourage all relevant energy bodies to exert optimum efforts to achieve the APAEC Phase II target of 32% by 2025. The Meeting agreed to continue the efforts towards the EI reduction target in 2025 through the implementation of the annual APAEC milestones, including strengthening cross-sectoral efforts and cooperation with DP/IOs.

19. The Meeting welcomed the: (i) initiation of the study on Status and Potential of EE&C for Transport and Industry Sectors in ASEAN through a range of capacity building activities, and (ii) the plan to initiate discussions on EE&C in the power sector through a Deep-Dive Workshop on EE&C in the Power Sector. The Meeting noted the significance of cross-sectoral cooperation with the transport sector that will contribute to the development of the actions and work programme to support overall mapping of EE&C activities in transport, including the shift to more efficient and less carbon emitting transport modes and deployment of electric vehicles and its supporting infrastructures.

20. The Meeting noted the heightened efforts to increase uptake of energy-efficient technologies and appliances through the adoption of national lighting roadmaps by eight (8) ASEAN Member States, supported by United Nations Environment Program - United for Efficiency (UNEP-U4E) as well as the completion of the capacity building for testing laboratories through round-robin testing activities in Indonesia, Malaysia, Philippines, Thailand, and Viet Nam, with the support of Japan-ASEAN Integration Fund (JAIF). The Meeting also noted the development of Sustainable ASEAN Energy Management Certification Scheme (SAEMAS) to establish an advanced energy manager training and certification systems in the region through the AJEEP Scheme 4 programme and Scheme 5 on EE&C management and technologies for carbon neutrality.

21. The Meeting appreciated the support of DP/IOs in various capacity building activities under the EE&C programme area, such as the ASEAN+3 Mitigation Cooperation Programme with Korea Energy Agency (KEA), ASEAN-Japan Energy Efficiency Partnership (AJEEP) with Energy Conservation Center Japan (ECCJ), Energy Efficiency

Policy and Financing workshop under the ASEAN-German Energy Programme (AGEP), and Singapore-IEA Regional Training Programme on Efficient Grid-Interactive Buildings.

22. On **Renewable Energy (RE)**, the Meeting noted ASEAN's achievement of 14.2% RE share in the Total Primary Energy Supply (TPES) in 2020. In addition, the RE share in installed power capacity reached 33.5% in 2020, with only a 1.5% gap remaining from achieving the 2025 target. With the finalisation of the '2nd ASEAN Renewable Energy Outlook: Towards Regional Energy Transition', the Meeting looked forward to further progress in the development of the 'ASEAN Long-Term RE Roadmap' and its recommendations in scaling up RE deployment in ASEAN.

23. The Meeting appreciated the continued engagement with existing DP/IOs in the areas of RE policy and capacity building, including with the German Agency for International Cooperation (GIZ) through AGEP, National Science and Technology Development Agency (NSTDA) of Thailand, Ministry of Economy, Trade and Industry (METI) of Japan through Cleaner Energy Future Initiative for ASEAN (CEFIA), China Renewable Energy Engineering Institute (CREEI), Energy Foundation China (EFC), the Energy and Resource Institute of India (TERI), and IRENA. The Ministers noted the follow-up study to be conducted on the 'Hydrogen Roadmap and Strategy for ASEAN' that is intended to articulate a strategic vision for hydrogen technology development in the region and set actionable targets.

24. On **Regional Energy Policy and Planning (REPP)**, the Meeting appreciated the sound implementation work and the need to leverage on opportunities for multilateral collaboration through new partnerships throughout the seven (7) programme areas of APAEC Phase II: 2021-2025. The implementation of APAEC Phase II achieved an overall score of 3,86 out of 5 in the first two years of its implementation from 2021-2022.

25. In welcoming the launch of the AEO7, the Meeting noted the AEO7 findings that acknowledge fossil fuels as the largest component of the region's energy system and that it is possible for ASEAN to achieve 28.7% renewable energy share in ASEAN's TPES and 46.7% energy intensity reduction by 2050, if current plans and projects were to stay the course. The Meeting also noted the findings that current national energy policies do not necessarily result in the achievement of all regional energy targets by 2025, but that it is still possible for ASEAN to achieve substantive progress if efforts to promote both renewable energy and energy efficiency were accelerated.

26. The Meeting noted the successful organisation of the ASEAN-IEA Workshop on the Southeast Asia Energy Outlook, held at the sidelines of the 21st REPP Subsector Network (REPP-SSN) Meeting, that highlights opportunities and possible pathways for low carbon transition in ASEAN. The Meeting also noted ACE's increasing capacity as the regional energy think tank and catalyst through its full leadership in data gathering, modelling, writing and dissemination of the AEO7. The Meeting appreciated the support from the AGEP, METI of Japan, and the ASEAN Climate Change and Energy Project (ACCEPT) as well as the technical review provided by various ASEAN partner organisations. AEO7 is also expected to provide context to the development of specific initiatives in the remaining three years of APAEC Phase II implementation.

27. To this end, the Meeting highlighted the importance of leveraging support from DP/IOs through capacity building activities as well as access to funding facilities for the acceleration of just energy transition and for strengthening energy resilience. The Meeting also highlighted the successful signing of MOUs between ACE and several universities in ASEAN such as Universiti Teknologi Malaysia (UTM), Institut Teknologi Bandung (ITB), Joint Graduate School of Energy and Environment (JGSEE), King Mongkut's University of Technology Thonburi (KMUTT) to strengthen energy collaboration and the development of regional expertise and talent to underpin the energy transition and ASEAN's achievement of its sustainable energy goals.

28. The Meeting acknowledged the energy-climate nexus related initiatives through the conduct of the Seminar on ASEAN Energy Establishments and Climate Change Organisations Cooperation on Energy Issues led by Brunei Darussalam as well as the ASEAN-Australia Capacity Building Workshops on Energy and Climate by ACE and Climateworks.

29. The Meeting noted the completion of the ACCEPT Phase I: 2018-2022 and welcomed the ACCEPT Phase II which will support the work of the ACE on the energy and climate nexus in ASEAN Member States and ASEAN's capacity in the energy transition to low carbon economies thereby contributing to global aspirations towards carbon neutrality or net-zero in the coming years. The Meeting thanked the Government of Norway for the continuous support provided through this project under the Norwegian-ASEAN Regional Integration Programme (NARIP).

30. On **Civilian Nuclear Energy**, the Meeting noted the potential for ASEAN Member States to explore nuclear energy for power generation in the future, given the emerging technologies and new developments in the field of nuclear energy. The Meeting noted the ongoing progress of studies that could help ASEAN assess potential options in the long-term and to identify the scope for further regional cooperation, especially in safety, security and safeguards, techno-economic feasibility, development of scientific and technological capacity, and social acceptance.

31. The Meeting welcomed continued collaboration in capacity building activities with partners such as the International Atomic Energy Agency (IAEA), Integrated Support Center for Nuclear Non-proliferation and Nuclear Security (ISCN) of the Japan Atomic Energy Agency (JAEA), World Institute for Nuclear Security (WINS), and the World Nuclear Association (WNA). The Meeting noted the need for the partners' activities to be aligned with the APAEC Phase II, particularly to focus on human resource development in nuclear science and technology for power generation. In addition, the Meeting welcomed the award of WINS Academy scholarships to 55 ASEAN participants to obtain professional certification and help develop ASEAN competency in the field of nuclear energy.

Cooperation with IEA to address energy security and energy transition

32. During the annual AMEM-IEA Dialogue, the Meeting welcomed the continuing partnership with IEA through the engagements and activities to support ASEAN in achieving its regional targets and energy priorities. The Meeting noted the briefing from IEA on the key findings of 'World Energy Outlook 2022' and the 'Southeast Asia Energy Outlook 2022', the evolving array of technologies for energy security and clean energy transitions, as well as updates and analysis on the implications of the European energy crisis and global supply disruptions in Southeast Asia.

33. The Meeting commended the conclusion of the ASEAN-IEA Three Year Rolling Work Programme 2019-2021 with the completion of the project 'Roadmaps Towards Sustainable and Energy Efficient Buildings and Cooling in ASEAN' and previous achievements in the conduct of the Feasibility Study for Multilateral Power Trade in ASEAN. The Meeting and the IEA further discussed the progress made for the implementation of the ASEAN-IEA Work Programme 2022-2025 to support the seven (7) programme areas of the APAEC Phase II: 2021-2025.

34. The Meeting welcomed the continuing progress on, among others, the initiatives on efficient grid-interactive buildings in ASEAN, peer-to-peer interface for ASEAN energy regulators on the minimum requirements for multilateral power trade, follow-up on the workshop outcomes of the 'Caught up in a storm: Implications of the European energy crisis for gas markets in Southeast Asia', updates on IEA's work stream on critical minerals with Southeast Asia as a region of focus, and the ACE-IEA work program on strategies to reduce RE costs and to integrate RE into power systems. The Meeting welcomed the 2022 Singapore-IEA Regional Training Programme on Efficient Grid-Interactive Buildings which was attended by participants from all 10 ASEAN Member States and looked forward to the Singapore-IEA Ministerial Roundtable at the Singapore International Energy Week (SIEW) to exchange views on energy security and more projects and activities for 2022/2023 to be implemented under ASEAN-IEA Work Programme 2022-2025.

Cooperation with IRENA towards mobilising support for RE projects

35. At the AMEM-IRENA Dialogue session, the Meeting discussed the findings of the '2nd Renewable Energy Outlook: Towards Regional Energy Transition' that gave focus to ASEAN's options for accelerating the deployment of renewables, end-user electrification, energy efficiency, and emerging and alternative clean energy technologies. The Meeting also noted the analysis and recommendations from IRENA's publications such as the World Energy Transition Outlook: 2022 – 1.5°C Pathway, Scaling Up Biomass for the Energy Transition: Untapped Opportunities in Southeast Asia, and, Renewable Energy for Agriculture: Insights from Southeast Asia. The Meeting appreciated the IRENA's continuous support to ASEAN and its Member States for promoting the development of renewable energy technologies through in-depth research, studies, analysis, and technical assistance.

36. The Meeting also appreciated the progress made in the implementation of the 2018 ASEAN-IRENA MOU that contributed to the achievement of the APAEC Phase I and II. The Meeting welcomed the proposed activities under the updated Action Plan to Implement

the ASEAN-IRENA MOU for the period 2022-2025, which aligns cooperation activities with the implementation of APAEC Phase II: 2021 – 2025.

37. The Meeting discussed the importance of mobilising finance for renewable energy projects in ASEAN to increase the renewables share in the energy mix. The Meeting urged the development of further initiatives deepening ASEAN-IRENA collaboration especially on developing bankable renewable energy projects in ASEAN and supporting project realisation under the financing platforms facilitated by IRENA such as the Climate Investment Platform (CIP) and the Energy Transition Accelerator Financing (ETAF) Platform. The Meeting noted that the first G20 Investment Forum on Energy Transitions with an emphasis on ASEAN was successfully held by IRENA and the G20 Presidency of Indonesia, and look forward to the 2nd Singapore-IRENA High-level Forum at SIEW, and encouraged the organisation of similar ASEAN-focused Investment Forums in the coming years.

Strengthening ASEAN-U.S. cooperation on energy

38. The 40th AMEM and U.S. held discussions to further enhance ASEAN-US energy cooperation given the urgency of addressing energy resilience and advancing regional integration and energy systems in ASEAN. The Meeting discussed the progress of the implementation of the ASEAN-US Energy Cooperation Work Plan 2021-2025 under four (4) priority areas on (i) energy security and resilience, (ii) renewable, advanced, and emerging energy technologies, (iii) energy market integration, and (iv) natural gas and petroleum.

39. The Meeting welcomed the United States Agency for International Development (USAID)'s Southeast Asia Smart Power Program (SPP), introduced at the ASEAN-US Special Summit held on 12-13 May 2022 in Washington D.C. The Meeting noted the collaboration between SPP and ACE to support APAEC activities. The Meeting welcomed the Singapore-US Third Country Training Programme (TCTP) on Renewable Energy on 22-24 March 2022. The Meeting also noted the US-Southeast Asia Clean Energy Roundtable in Singapore on 14 July 2022, and looked forward to the feasibility study on enhancing regional energy connectivity to strengthen energy security and grid resilience.

40. The Meeting looked forward to the follow-up work under the third phase of the USAID-supported AIMS III, including to introduce interconnection screening methodologies to help ASEAN identify high-priority cross-border interconnections and facilitate the conduct of pre-feasibility and detailed feasibility studies for project development with the support of the broader U.S. government programs and other development partners. The Meeting also looked forward to USAID's support for the multi-year training program to assist ASEAN Member States in terms of having common cross-border engineering skills, knowledge transfer, regulatory/legal understanding and financial investment knowledge for the APG projects. The Meeting also looked forward to the U.S. roundtable session on battery energy storage systems on 27 October 2022 at SIEW and further exchanges and collaboration under the ASEAN-US energy cooperation.

ASEAN Energy Awards and AEBF 2022

41. The Meeting congratulated the 78 awardees of the ASEAN Energy Awards 2022 recognised for best practices in energy efficiency and conservation, renewable energy, excellence in energy management, and youth awards. The awards were given in the areas of: (i) (ii) Green Building (5 awards); (iii) ASEAN Energy Efficient Building (16 awards); (iv) ASEAN Energy Management in Buildings and Industries (14 awards); (v) ASEAN Renewable Energy (16 awards); (vi) Awards for Excellence in Energy Management by Individuals conferred to senior energy officials in recognition of their significant contributions to advance ASEAN's energy cooperation goals (8 awards); and (vii) ASEAN Energy Youth Awards, (19 awards), which is jointly organised with Southeast Asia Ministers of Education Organisation (SEAMEO) and Ministry of Trade, Industry and Energy (MOTIE)/Korea Energy Agency (KEA). The Meeting also congratulated the additional six (6) trainers certified under the AJEEP Training of Trainers programme, bringing the total of certified energy managers to 80 trainers.

42. The Meeting commended the Ministry of Mines and Energy of Cambodia and ACE on the successful organisation of the hybrid AEBF 2022, including the 2nd ASEAN International Conference on Energy and Environment (AICEE).

41st AMEM

43. The Meeting looked forward to the 41st AMEM in 2023 to be hosted by Indonesia.

The Meeting expressed their sincere appreciation to the Government and people of Cambodia for hosting the 40th AMEM and its Associated Meetings.
