JOINT MINISTERIAL STATEMENT OF THE 35TH ASEAN MINISTERS ON ENERGY MEETING: "ONE ASEAN COMMUNITY THROUGH RESILIENT AND SUSTAINABLE ENERGY"

Issued in Pasay City, Metro Manila, Philippines

- The 35th ASEAN Ministers on Energy Meeting (AMEM) was held on 27 September 2017 in Pasay City, Metro Manila, Philippines. H.E. Secretary Alfonso G. Cusi, Secretary of Energy of the Philippines, officiated and chaired the Meeting. H.E. Minister S. Iswaran, Minister for Trade and Industry (Industry) of Singapore was the Vice Chair. The 14th ASEAN+3 Ministers on Energy Meeting (AMEM+3), the 11th East Asia Summit Energy Ministers Meeting (EAS EMM), and the 1st Dialogue between AMEM and the International Renewable Energy Agency (AMEM-IRENA Dialogue) were also held in conjunction with the 35th AMEM.
- 2. Mr. Alfonso G. Cusi, Secretary of Department of Energy of the Philippines officiated the 35th AMEM and associated meetings as well as the ASEAN Energy Business Forum (AEBF) 2017. In his opening address, Mr. Cusi commended the series of meetings and major events being hosted by the Philippines in celebrating the 50th founding anniversary of the ASEAN. He underlined that ASEAN must confront new energy realities in the following trends: Commitment to a Future of Renewables with Innovations towards Sustainability, and LNG as the Bridging Fuel. To this end, he assured that ASEAN is the place to invest. In addition, he expressed that while these developments present challenges, they can become opportunities if ASEAN Member States put up their utmost efforts.

ASEAN energy outlook and enhancing support to APAEC implementation

- 3. The Ministers welcomed with overall progress in the second year of implementing the ASEAN Plan of Action for Energy Cooperation 2016-2025 (APAEC) Phase 1: 2016-2020. The Ministers noted the steady progress towards secure, accessible, affordable and sustainable energy in ASEAN, including measures to achieve the regional targets of reducing ASEAN energy intensity and increasing the share of renewables in the ASEAN energy mix.
- 4. The 5th ASEAN Energy Outlook (AEO5) was launched during the 35th AMEM, with the Ministers noting that primary energy demand in ASEAN is expected to grow by as much as 2.3 times by 2040 in the Business-as-Usual (BAU) scenario. The AEO5 also identified that substantial energy savings could be achieved through the implementation of energy efficiency (EE) and renewable energy (RE) initiatives, as projected in the advanced scenarios. In this regard, ASEAN will continue to monitor improvements in technologies while capitalising on the global trend of rapidly decreasing costs of variable RE. Nevertheless, robust policies and investments are still very much needed to transform the energy landscape in ASEAN.
- 5. The Ministers welcomed the launch of the ASEAN Energy Database System (AEDS) www.aeds.aseanenergy.org – which serves as the data reference on energy statistics in the ASEAN Member States (AMS). It aims to compile the energy data of AMS on a regular basis and used as platform to monitor the energy development of ASEAN, including the APAEC EI and RE targets. The Ministers also looked forward to further enhancement of the database system with the strong commitment and support by AMS.

- 6. In addition, the Ministers commended the deepening ASEAN cooperation with Dialogue Partners (DPs), International Organisations (IOs), sectoral Development Partners, as well as the increased engagement with expert groups from the private sector, universities and academia. They welcomed the launch of the first AMEM-IRENA Dialogue in 2017 and looked forward to strengthening the collaboration with IRENA towards greater integration of renewables in the region. The Ministers also welcomed the inaugural "Singapore-IEA Energy Efficiency Training Week for Asia Pacific" in July 2017, which helped to build up capacity in energy efficiency for more than 80 participants from ASEAN and the region. In addition, the Ministers noted the inaugural Singapore-IEA Forum at the Singapore International Energy Week (SIEW) in October 2017, which will focus on energy investments in the region.
- 7. The Ministers welcomed the inaugural ASEAN Energy Cooperation Report 2017. The report aims to profile the key achievements in 2016/2017 as well as the strategic directions of the ASEAN energy sector to the international community. The Ministers also noted the outcomes and enhanced performance monitoring of the strategies of the APAEC, and looked forward to the Mid-term Review of APAEC Phase 1 in 2018.

Working to achieve ASEAN's energy intensity reduction targets

- 8. On energy efficiency and conservation (EE&C), the Ministers welcomed the steady progress in the implementation of the APAEC measures on energy efficiency, noting that ASEAN achieved an energy intensity reduction of 18.3% by end-2015, compared to 2005 levels. The Ministers were pleased with the good prospects of realising ASEAN's energy intensity reduction target and commended efforts underway to realise the energy intensity reduction target of 20% by 2020, based on 2005 levels.
- 9. Specific to pursuing energy efficiency for lighting and appliances, the Ministers noted that the work towards the adoption of regional and national policy roadmaps for Minimum Energy Performance Standards (MEPS) in lighting and air conditioners are well underway. For lighting, the ASEAN Efficient Lighting Market Assessment Report is now complete and forms the basis for the ongoing preparation of the 'Regional Policy Roadmap towards MEPS for Lighting'. The Ministers noted that several AMS had successfully adopted the 'Regional Policy Roadmap towards MEPS for Air-conditioners' into their respective national policy roadmaps.
- 10. The Ministers underscored the importance of cross-sectoral cooperation within ASEAN to pursue the ASEAN Mutual Recognition Arrangements (MRAs) for energy performance testing of home appliances in the region. They welcomed the feasibility study to expand the existing ASEAN MRA for Electrical and Electronic Equipment in order to include energy performance testing for home appliances, with initial focus on air conditioners. The Ministers expressed appreciation for the support from the various DPs for capacity building for testing laboratories and relevant product manufacturers, and, for campaign initiatives to raise consumer awareness.
- 11. The Ministers noted the completion of the ASEAN Energy Service Companies (ESCO) Report, in collaboration with the Korea Energy Economic Institute (KEEI). The Ministers also noted the outreach activities directed towards technology providers and ESCOs in the region during the 2017 ASEAN Energy Business Forum (AEBF). Acknowledging the 17-year long collaboration between ASEAN and Japan on EE&C, the Ministers encouraged the AMS to deepen their commitment to further enhance the ASEAN Energy Manager Training and Accreditation Programme under the AJEEP Scheme 2 and the development of EE&C legal and regulatory framework for Cambodia and Lao PDR under the AJEEP Scheme 3.

12. The Ministers also called for further progress in the implementation of similar efforts to improve energy efficiency for other major consumers, such as for buildings and motor vehicles. They noted the activities planned to develop regional energy efficiency guidelines for buildings and EE financing policy recommendation with the support of the ASEAN-German Energy Programme (AGEP), as well as to boost EE efforts in the transport sector in cooperation with other relevant ASEAN bodies.

Bolstering efforts to attain ASEAN's aspiration on renewable energy

- 13. Noting that ASEAN has so far achieved a 13.6% share of RE in the ASEAN energy mix in 2015, the Ministers agreed to continue efforts work towards the APAEC target of 23% RE share in the ASEAN energy mix by 2025. To this end, the Ministers tasked the ASEAN Senior Officials Meeting on Energy (SOME) to better track the progress of RE deployment in the region.
- 14. The Ministers discussed the role of financing and investments crucial in enabling widespread RE deployment in the region. Considering the future cost trends for both fossil fuels and RE, it is very important for AMS to have proper planning on the investments for the power sector, particularly in reaching the ASEAN RE target in the most economical way. To help improve the availability of commercial or project finance for renewables in the region, the Ministers welcomed efforts to develop regional policy recommendations on RE financing in ASEAN, as well as to prepare a reference map on available loan guarantees/insurance for renewables. The Ministers also looked forward to the related capacity building for potential RE financing institutions to be conducted in November 2017 with the support of AGEP.
- 15. The Ministers welcomed the publication of the 'Renewable Energy Outlook for ASEAN: An REmap Analysis' which was launched at the SIEW 2016. The REmap Outlook provided a focused analysis of the options and mechanisms for AMS to advance renewables in the region, thereby helping to narrow the gap between the likely outcomes of business-as-usual RE programmes in the AMS and the achievement of the collective ASEAN RE target. The Ministers noted that the publication is a result of analytical collaboration among the ASEAN Centre for Energy (ACE) and the International Renewable Energy Agency (IRENA) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).
- 16. To enhance the knowledge base for RE in the region, the Ministers noted the completion of the ASEAN RE portal <u>www.sustainableenergyforasean.info</u> which provides access to information, such as the Study on the Levelised Cost of Electricity and the REmap Analysis applied to an AMS and best practices in renewable energy development.

Enhancing AMS capabilities on civilian nuclear energy

17. The Ministers appreciated the widening ASEAN cooperation with various DPs, including Canada, China, Japan, Russia and the United States of America, to support ASEAN in building capabilities on policy, technology and regulatory aspects of nuclear energy. Along with the requisite technical expertise for nuclear regulation, safety and emergency preparedness, the Ministers also emphasised that public acceptance and safety issues are crucial to developing nuclear power plants in the region. The Ministers similarly acknowledged the benefits of ASEAN cooperation to address public confidence in both the domestic and regional fronts, including coverage of any potential impacts on neighbouring countries.

18. The Ministers noted the progress achieved in implementing the ASEAN-Canada Nuclear Energy Work Programme which supported capacity building activities on nuclear security and safety this year and is supporting the ongoing pre-feasibility study on the potential development of a nuclear power plant in an AMS. They also looked forward to enhancing cooperation with the ASEAN Network of Regulatory Bodies on Atomic Energy (ASEANTOM) in next year's conduct of studies to help AMS establish relevant nuclear legal and regulatory frameworks. The Ministers also noted the existing engagement between some AMS and the International Atomic Energy Agency (IAEA) on civilian nuclear energy and looked forward to materialising a practical cooperation arrangement with IAEA within the ASEAN energy cooperation framework, particularly on regulation, safety and public understanding of civilian nuclear energy.

Acknowledging the role of coal and clean coal technologies

- 19. The Ministers discussed the outlook through 2040 on the rising coal use in the region and reaffirmed the need for increased promotion of clean coal technologies (CCT). They acknowledged the continuing role of coal in addressing the energy security, economic competitiveness, and environmental sustainability in the region.
- 20. The Ministers also appreciated the insights provided by the report 'ASEAN's Energy Equation: The Role of Low Emission Coal in Driving a Sustainable Energy Future' prepared in joint collaboration between ACE and the World Coal Association (WCA). The Ministers acknowledged the report outcomes and emphasised the intention to transition away from inefficient coal technologies. Enhanced deployment of cleaner coal technology will reduce ASEAN's emissions profile, while ensuring affordable energy for economic development and poverty reduction. The Ministers call on DPs, IOs, international financial institutions, and the energy business community to support AMS to adopt low-emission coal as part of their commitment to the Paris Agreement. The Ministers welcomed further collaboration between ACE and WCA to deliver research and capacity building activities related to the CCT work programme.
- 21. The Ministers appreciated the continuing efforts of Indonesia in conducting CCT capacity building workshops in cooperation with ACE, the Global Carbon Capture Storage Institute (GCCSI) and the Japan Coal Energy Centre (JCOAL) to raise the awareness of AMS policy makers on the promotion and adoption of CCTs as well as to gain understanding on the techno-economics and latest trends on CCT globally. Towards forging a common strategy to advance CCT in ASEAN, the Ministers expressed appreciation for the initiatives to organise a High-Level Policy Dialogue in 2018 by Malaysia and CCT and CSR Workshops by Thailand also in 2018. The Ministers expressed similar appreciation for Indonesia's proposal to cooperate with ROK on a feasibility study to pilot coal-biomass and coal upgrading in Indonesia and to identify potential applications in other AMS. They also encouraged more AMS to commit their participation in the development and timely update of the ASEAN Coal Database and Information System (ACDIS).

Ensuring accessibility and security of oil and gas supply

22. The Ministers commended the ASEAN Council on Petroleum (ASCOPE) for continuing the efforts to facilitate intra-ASEAN LNG cooperation and trade towards improving energy security in ASEAN. The Ministers in particular welcomed ASCOPE's completion of a standard LNG Master Sales and Purchase Agreement which serves as a reference for member countries to provide greater flexibility in destination clause and minimise associated LNG contract costs. ASCOPE has also embarked on a gas quality initiative to analyse gas quality adjustments needed to enable gas to be transported across member countries. ASCOPE also completed the ASEAN Gas Infrastructure Database which now shares and consolidates technical information on gas pipelines, gas processing plants, LNG liquefaction and RGT terminals in the region.

- 23. The Ministers were encouraged by the pace of recent developments in implementing the long-term goal of open access systems in gas markets in the region. They recalled that ASEAN targeted open access in at least one initial AMS during APAEC 2016-2025 Phase 1: 2016-2020 as forerunner to enhancing greater security for gas supply in the region. The Ministers welcomed Malaysia, now the third AMS after Singapore and Thailand, to have obtained approval for its implementation. Third party access (TPA) will allow access to any party operating in these AMS to utilise gas facilities, including transmission pipelines, distribution pipelines and regasification terminals, on the same terms and conditions as other parties. Besides improving the commercial environment for gas investments, implementing open access will help improve the security and accessibility of gas supply in the region.
- 24. The Ministers also welcomed ASCOPE's initiative on the Gas Advocacy White Paper which aims to (i) scan the region's current gas industry landscape, (ii) enhance compatibility of ASEAN's LNG terminals, (iii) identify steps to achieve a common ASEAN gas market, and (iv) identify commercial opportunities including small-scale LNG, LNG bunkering, etc. In the medium to long-term, as economies gradually transition towards a low carbon economy, gas is expected to play a bigger role in the energy mix, and become the fuel of choice as countries opt for clean energy. Among the thriving emerging markets, Southeast Asia will be one of the key markets driving demand for LNG to cater to rising demand primarily from the power sector. LNG stands to provide a solution for ASEAN's long-term energy supply security. The Ministers requested ASCOPE to align their next steps on implementing the goals of the APAEC in enhancing regional cooperation in LNG and looked forward to ASCOPE's support for Phase 2 (2021-2025) of the APAEC.

Initiating multilateral electricity trade in the ASEAN Power Grid

- 25. On advancing multilateral electricity trade in the ASEAN Power Grid (APG), the Ministers were very pleased with the signing of the Energy Purchase and Wheeling Agreement (EPWA) among Lao PDR, Thailand and Malaysia (LTM), which will bring about the very first multilateral electricity transaction in ASEAN. The EPWA implements Phase 1 of the path finding Lao PDR-Thailand-Malaysia-Singapore Power Integration Project (LTMS-PIP) and will enable the purchase of up to 100 MW electricity power from Lao PDR to Malaysia using Thailand's existing transmission grid. The Ministers congratulated the LTM countries for the milestone achievement towards multilateral power trade in the region and encouraged AMS to use the momentum to further expand multilateral trade in the APG.
- 26. The Ministers noted the ongoing efforts by the ASEAN Power Grid Consultative Committee (APGCC) and the Heads of ASEAN Power Utilities/Authorities (HAPUA) to support AMS in developing the APG interconnection infrastructure, and, to examine the feasibility of expanding current bilateral trade to multilateral electricity trade in the ASEAN Economic Community, through the APG. In particular, the Ministers welcomed the establishment of the APG Special Task Force (APG STF) and the adoption of its Terms of Reference to assist the APGCC in accelerating the realisation of APG multilateral power trade. The Ministers also noted that HAPUA will commence its studies on the requirement for APG institutions to support the implementation of the APG.
- 27. Noting that the power sector is one of the most significant contributors for the region to achieve its aspirational goal of 23% share of RE in the ASEAN Energy Mix by 2025, the Ministers highlighted the crucial role of HAPUA member utilities in maintaining system reliability and power quality across the region. They also noted the outcomes of HAPUA Council's commitment to pursue multilateral power trade in the APG and to update the APG Interconnection Master Plan Study (AIMS).

28. The Ministers also noted the publication of the first ASEAN Power Cooperation Report by ACE and China Renewable Energy Engineering Institute (CREEI) and its findings on power technology strategic directions and efficient power cooperation platform for the substantial promotion of ASEAN power cooperation and integration.

Recognising best practices through the ASEAN Energy Awards

- 29. The Ministers welcomed the continuing annual tradition of recognising best practices in the development and deployment of cleaner and efficient energy through the annual ASEAN Energy Awards. Since 2000, the Awards have profiled best practices in the region by engaging the private sector, including private developers, industries and consumers.
- 30. In particular, the Ministers congratulated the 84 awardees of the ASEAN Energy Awards 2017 that were recognised for best practices in renewable energy, energy efficiency and conservation, and coal resource development. The awards were given in the areas of: (i) ASEAN Renewable Energy with 17 out of 25 entries from six (6) countries, (ii) ASEAN Energy Management in Building and Industries with 13 out of 26 entries from four countries; (iii) ASEAN Energy Efficient Building with 10 awards out of 21 entries from six (6) countries; (iv) ASEAN Green Building with four (4) awards out of 5 entries from four (4) countries; (v) Coal with 17 awards out of 20 entries from five (5) countries. In addition, Awards for Excellence in Energy Management by Individuals were also conferred to 18 senior energy officials in recognition of their significant contributions to advance the ASEAN energy cooperation goals.
- 31. The Ministers recognised the eight (8) successful trainers from the AMS who passed the Energy Manager Training and Certification Programme in 2016 under the AJEEP Scheme 2 and looked forward to further increase the number of certified energy trainers in the region in order to promote EE&C in buildings and industries in the AMS.

36th AMEM

32. The Ministers agreed to convene the 36th AMEM in October 2018 in Singapore. The Ministers expressed their sincere appreciation to the Government and people of the Philippines for the warm hospitality accorded to the delegations and the excellent arrangements made for the 35th AMEM and associated meetings.

ASEAN MINISTERS FOR ENERGY

- 1. **H.E. Pehin Dato (Dr) Mohammad Yasmin Umar**, Minister of Energy and Industry at the Prime Minister's Office of Brunei Darussalam;
- 2. H.E. Dr. Ith Praing, Secretary of State, Ministry of Mines and Energy of Cambodia;
- 3. **Mr. Saleh Abdurrahman**, Secretary General of National Energy Council, representing the Minister of Energy and Mineral Resources of Indonesia;
- 4. H.E. Mr. Thongphath Inthavong, Vice Minister of Energy and Mines of Lao PDR;
- 5. Hon. Datuk Seri Panglima Dr. Maximus Johnity Ongkili, Minister of Energy, Green Technology and Water of Malaysia;
- 6. H.E. U Win Khaing, Union Minister of Electricity and Energy of Myanmar;
- 7. Mr. Alfonso G. Cusi, Secretary of Department of Energy of the Philippines;
- 8. H.E. Mr. S. Iswaran, Minister of Trade and Industry (Industry) of Singapore;
- 9. H.E. General Anantaporn Kanjanarat, Minister of Energy of Thailand;
- 10. H.E. Mr. Hoang Quoc Vuong, Minister of Industry and Trade of Viet Nam; and
- 11. H.E. Dr. A.K.P. Mochtan, Deputy Secretary-General of ASEAN for Community and Corporate Affairs.