

# AGEP

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ASEAN-German Energy Programme Newsletter



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## Editorial Note

### DEAR READERS,

With a heavy heart, we would like to announce that it is time for ASEAN-German Energy Programme (AGEP) Phase II to bid you farewell. This collaborative project between ASEAN Centre for Energy (ACE) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry of Economic Cooperation and Development (BMZ) is closing this year in December. It has been a great honour for us to regularly share updates on ASEAN-Germany initiatives in the advocacy of energy transitions.

Our last updates in this issue include Focus Group Discussion (FGD) report on Biogas Study Development, the ASEAN Energy Outlook 7's Country Visit & Workshop II and ASEAN Centre for Energy's training on effective report writing. We also share the report on capacity-building training on data modelling and Focus Group Discussion on RE Financing. Furthermore, we are delighted to

share updates on AGEP's participation in the energy-climate nexus, gender, and energy policy workshop on 22 March 2022.

With this issue of the AGEP newsletter, we also say goodbye to Sergey Makarov and Junianto M, who have been part of the ASEAN-German Energy Programme since 2019. We thank Mr Makarov and Mr Junianto for their dedicated service to ASEAN-German Energy Programme. We are pleased that Mr Makarov will continue his assignment in Uzbekistan, while Mr Junianto will also start a new chapter as a Digital Transformation advisor in another project.

We look forward to greeting you and sharing new updates on other opportunities next year.

Thank you,  
**AGEP Phase II Editorial Team**

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# Biogas Development in ASEAN Electricity Sector

The ASEAN-German Energy Programme (AGEP), a jointly implemented programme between the ASEAN Centre for Energy (ACE) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), organised a fruitful Focus Group Discussion (FGD) for the study “Biogas Development in ASEAN Electricity Sector” on 17 March 2022.

The FGD was conducted virtually and attracted more than 130 participants representing different key stakeholders in biogas, including government agencies, development banks, energy consumer groups, industry associations, project developers, advocacy groups, academe, and think tanks from 10 ASEAN Member States (AMS) and other nations outside the region such as Japan, China, Germany, and other European countries.

This FGD is part of the activities from the study to validate the results from desktop research, surveys, and interviews on how the key stakeholders in AMS perceive and plan the biogas-to-electricity pathways. Three aspects have been brought up in the discussions, which are (1) to explore the existing barriers, risks, and opportunities of biogas-to-electricity in ASEAN, (2) to identify the appropriate technologies and feedstock for biogas in the ASEAN power sector, and (3) to understand the policy gap to promote biogas development in the ASEAN electricity system.

In the opening remarks, Mr. Asdirhyme Bin Abdul Rasib – Renewable Energy Sub Sector Network (RE-SSN) chair, Dr. Nuki Agya Utama – Executive Director of ACE, and Mr. Sergey Makarov, Principal Advisor of AGEP, emphasised

the importance of biogas in increasing electricity production, diversifying the regional energy mix, and accelerating the clean energy transition in ASEAN.

Dr. Susanne Rentzow, Regional Project Director of European Commission-funded EURAXESS ASEAN, presented the introduction to Euraxess. Euraxess is an initiative backed by the European Union (EU) and associated countries to support research mobility and career development and strengthen scientific collaboration between Europe and the world. In the second keynote speech, Professor Hideki Ohgaki, Group Leader for Environment and Energy Japan-ASEAN Science, Technology and Innovation Platform (JASTIP), presented “Current biogas-to-electricity status, pilot case, and funding opportunity.” He highlighted that to overcome the current obstacles of biogas development, such as high transportation costs and insufficient resources for domestic supply, all-out efforts and strong collaboration in all sectors of society, such as industry, consumers, and the government, are critical.

To give the audience an overview of AGEP, Ms. Melati Wulandari, Advisor from AGEP, shared an introduction to AGEP Phase II. The ACE-GIZ cooperation timeline and the objectives of AGEP with past and current activities have been highlighted. In the next session, Ms. Monika Merdekawati, Technical Officer from ACE, introduced the organisation and study development. The study serves Programme Area No.5 – Renewable Energy, with the Outcome-based Strategy No.5 – Support biofuel and bioenergy development, according to ASEAN Plan of Action for Energy Cooperation (APAEC) Phase II (2016 – 2025).



Additionally, Dr. Takeshi Takama, Chief Executive Officer of Sustainability & Resilience (su-re.co), presented the study's preliminary results. Su-re.co currently works as a think-tank in climate change and energy projects, consulting government and international organisations. Dr. Takama illustrated the potential for biogas development, where solid and waste-water management and agriculture are the top-ranked potential sectors to implement biogas.

The main agenda was a series of discussion sessions moderated by su-re.co. The first one focused on identifying the barriers and opportunities for biogas development in ASEAN countries, while the second one aimed at feasible technology and feedstock for biogas-to-electricity. During the discussion session, questions were given using the online platform to address the barriers and opportunities of biogas in the ASEAN power sector from non-regulatory and regulatory aspects. These participants were then divided into three breakout

rooms to share their opinions on the mentioned topics. Different perspectives from key stakeholders were received, providing insightful information regarding the current status and technological, economic, political and regulatory, social and environmental issues in biogas development.

Finally, in the closing remarks, Mr. Septia Buntara Supendi, Manager of REE Department at ACE, expressed his gratitude to all the speakers from the EU, Japan, and participants from AMS for their active participation throughout the workshop. Mr. Septia highlighted the importance of global collaboration to achieve the regional RE targets. He emphasised that the opinions and ideas exchanged during the FGDs were beneficial to the study itself and the bioenergy development in ASEAN. He hoped the study would provide a reference point to the governments and policymakers, and more discussions on bioenergy development would be conducted in the future. (GV/ MW)

## Joining Forces to Finalise the 7<sup>th</sup> ASEAN Energy Outlook (AEO7)

The development of the next ASEAN Energy Outlook (AEO) edition has been progressing rapidly for the past few months. From February to mid-March, a set of country visits with all 10 ASEAN Member States (AMS) was concluded virtually. In these sessions, the team finalised the data gaps, modelling approach and assumptions. Two capacity-building programmes were also organised for the AEO team to support the development of the AEO 7 publication. The activities included:

- Effective Report Writing Training held once/twice a week between February 25<sup>th</sup> until April 5<sup>th</sup>, and
- Data Visualisation Training, supported by the Clean, Affordable and Secure Energy for Southeast Asia (CASE) regional project which was held weekly from May 20<sup>th</sup> to June 13<sup>th</sup>.

On April 25<sup>th</sup> – 27<sup>th</sup> 2022, the second AEO Workshop was held back-

to-back with the Capacity Building for AMS on Energy Modelling

with LEAP (Low Emissions Analysis Platform). The workshop, attended by around 40 participants from 8 AMS including the AEO Working Group and focal points from Specialised Energy Bodies (SEBs) and Sub-sector Networks (SSNs), was set to present the updates and initial results of AEO modelling works. While the capacity building was set to improve the understanding of LEAP which also marked the first time AGEF supported ACE to deliver its training material without an external provider.

Throughout June and July, the team conducted 2 sets of consultation meetings with the AEO consultant, Stockholm Environment Institute (SEI), which happens to be the



developer of LEAP. Besides finalising the AEO model and results across all scenarios: Baseline scenario, AMS Target Scenario (ATS), APAEC target Scenario (APS), and Least-cost Optimisation (LCO), several topics were also discussed to improve and shape the AEO quality such as optimisation, the penetration of emerging technologies, and secondary analysis.

AGEF will continue its support in the finalisation phase by bringing in an expert copy editor and layout designer to prepare the flagship publication, the 7<sup>th</sup> ASEAN Energy Outlook (AEO7), for launching at the 40<sup>th</sup> ASEAN Ministers on Energy Meeting (AMEM) later in September this year. (MW)

# Renewable Energy Sub-Sector Network (RE-SSN) Meeting and the Associated Meetings 2022



The 29<sup>th</sup> Renewable Energy Sub-Sector Network (RE-SSN) Annual Meeting and the Associated Meetings were organised virtually on 11 – 13 May 2022 by the Ministry of Energy and Mineral Resources (MEMR) of Indonesia and the ASEAN Centre for Energy (ACE). On the first day, the Workshop on Energy Storage Development in ASEAN was organised to exchange energy storage information and policies on a global and regional scale, best practices of energy storage deployment, and business models. In addition, the workshop provided insightful recommendations regarding energy storage in ASEAN, such as emphasizing the benefits of battery storage systems (BESS), providing incentives for ancillary services with further RE penetration, and utilising existing hydropower facilities to develop pumped hydro energy storage systems.

The second day began with the Focus Group Discussion (FGD) of the ASEAN RE Long-term Roadmap, with participants from AMS working group, RE-SSN Focal Points, and guest speakers from International Renewable Energy Agency (IRENA) and United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). The FGD discussed the national RE roadmaps, the existing RE policies, and valuable case practices from dialogue partners/international organisations (DPs/IOs) in developing roadmaps internationally. The recommendation of using the key findings of the 7<sup>th</sup> ASEAN Energy Outlook (AEO7) – one of the flagship publications of ACE supported by AGEP, in the development of the roadmap was also adopted. The agenda was then continued with ASEAN-IRENA Consultation Workshop discussing the IRENA-ACE's ongoing projects, the ASEAN Plan of Action for Energy Cooperation (APAEC) Phase II activities and its priorities for 2022 – 2023 with the RE-SSN Focal Points.

The 29<sup>th</sup> RE-SSN Annual Meeting was held on the last day, 13 May 2022. Mr Asdirhyme Abdul Rasib, Senior Undersecretary for Sustainable Energy, Ministry of Energy and Natural Resources (KeTSA) of Malaysia, and Ms Andriah Feby Misnah, Director of Various New and Renewable Energy of MEMR Indonesia, were respectively the chair and vice-chair. In the meeting, the RE-SSN Focal Points discussed the progress of

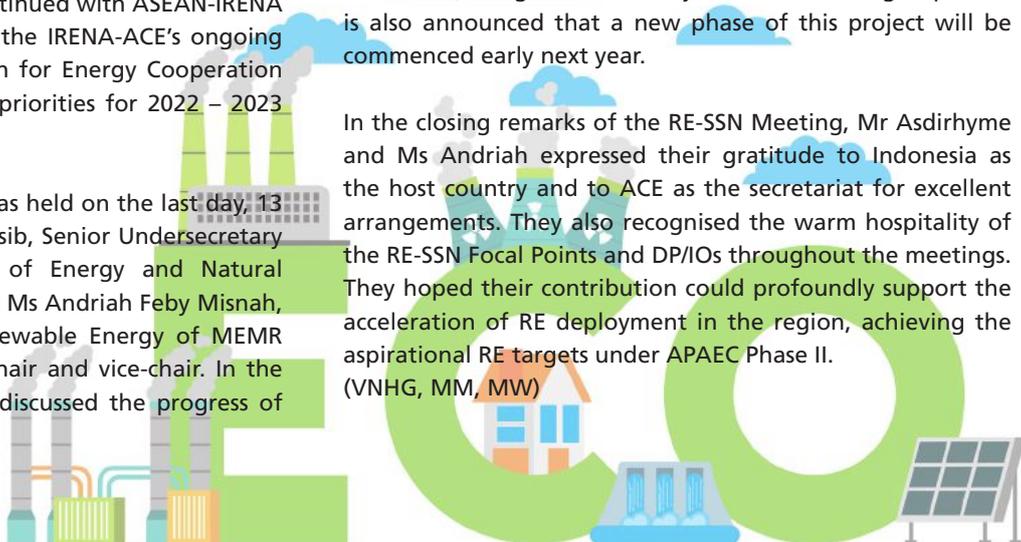
the implementation of the RE Programme Area under the APAEC Phase II: 2021 – 2025, the outcomes of the associated meetings, the collaboration activities with DPs/IOs, and also provided insightful guidance to complete the ongoing milestones. In this meeting, the progress of new initiatives was presented. Two notable studies implemented by AGEP, “Biogas Development in ASEAN Electricity Sector” (Biogas Study) and “Impact Analysis and Review on Governance of RE Financing Scheme” (RE Financing), were mentioned. The reports of both studies are under the finalisation process and are expected to be published in September 2022.

In the afternoon session, the meeting had a dedicated session on a discussion between RE-SSN Focal Points, ASEAN Secretariat, and ACE with International Organisations (IOs) and Dialogue Partners (DPs). Representatives from DPs/IOs, namely GIZ, IRENA, China Renewable Energy Engineering Institute (CREEI), Minister of Economy, Trade and Industry (METI) Japan, Energy Foundation China (EFC), and National Science Technology and Development Agency (NSTDA) presented their progress



of activities in RE. Sergey Makarov, the Principal Advisor of the ASEAN-German Energy Programme (AGEP), mentioned AGEP's long-standing cooperation between ACE and GIZ, also achievement throughout this project period as it is coming to an end, including the 6<sup>th</sup> and 7<sup>th</sup> ASEAN Energy Outlook (AEO6 and AEO7), Biogas-to-Electricity and RE Financing Report. It is also announced that a new phase of this project will be commenced early next year.

In the closing remarks of the RE-SSN Meeting, Mr Asdirhyme and Ms Andriah expressed their gratitude to Indonesia as the host country and to ACE as the secretariat for excellent arrangements. They also recognised the warm hospitality of the RE-SSN Focal Points and DP/IOs throughout the meetings. They hoped their contribution could profoundly support the acceleration of RE deployment in the region, achieving the aspirational RE targets under APAEC Phase II. (VNHG, MM, MW)



# Assessing Impact and Governance of ASEAN's Renewable Energy Financing



Conducted virtually on 17 March 2022, the Focus Group Discussion (FGD) on Assessing Impact and Governance of Renewable Energy Financing was participated by various key stakeholders, from the government agencies, national and international financial institutions, development banks, project developers, and officials from six of the ASEAN Member States (AMS). The result of the FGD will be included in the currently developed study on RE financing, which will be a strategic report that provides insights on the impacts and effectiveness of various financial support schemes on the RE growth as a reference to the AMS governments and developers.

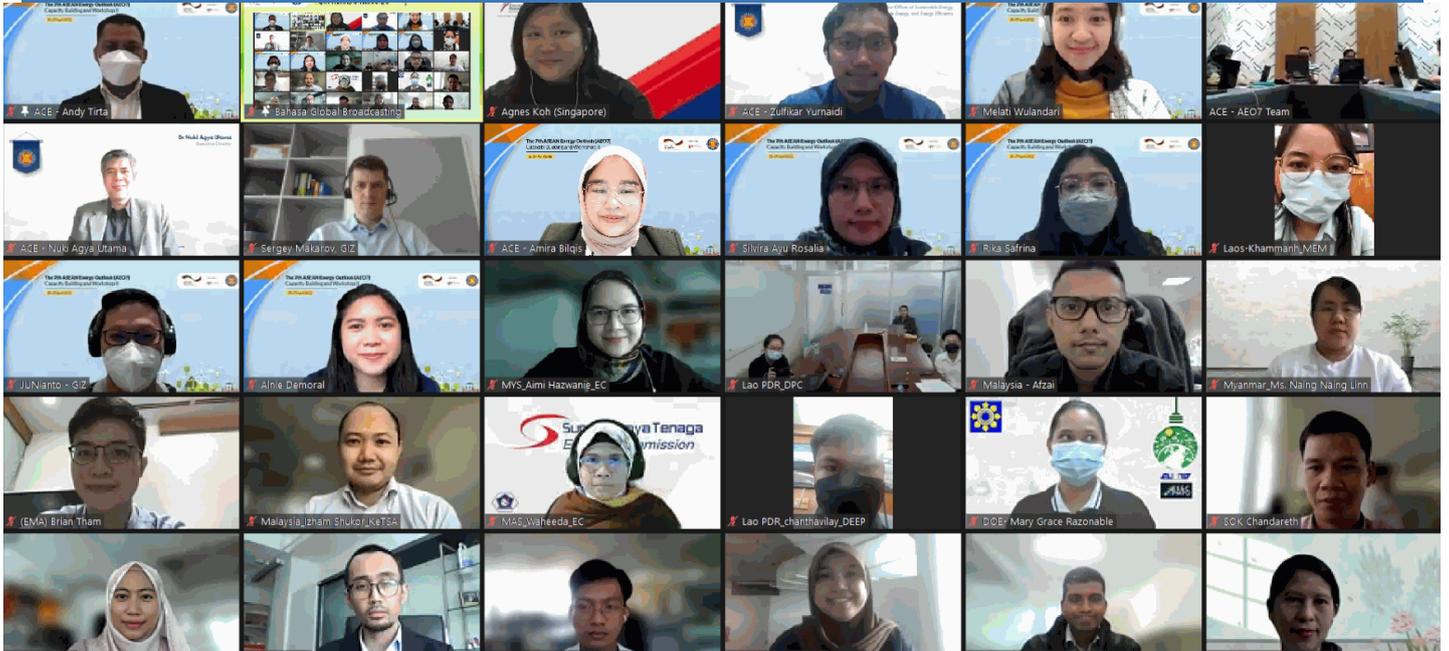
The FGD, as part of activities conducted during the study development, discussed the impact and governance of the existing financing schemes. Several topics were discussed, such as the investment trends in Renewable Energy (RE), associated gaps, challenges

and risks of financing, existing financial tools, policies, and institutions that support RE. Albeit the development challenges, the region sees a better financing opportunity for RE acceleration in the AMS. The findings will be compiled in a strategic report which is expected to be launched in Q2 of 2022.

Continuing the over decade-long cooperation between ASEAN and Germany, ASEAN-German Energy Programme (AGEP) has contributed to the ASEAN Plan of Action for Energy Cooperation (APAEC), particularly in energy efficiency, renewable energy, and regional energy policy planning. This strategic report will contribute to the renewable energy program of the APAEC 2021-2025, which targets 23% of RE share in 2025. APAEC is the regional blueprint for the energy sector in the framework of the ASEAN Economic Community (AEC) implementation.

(JM)

# Data and Modelling and Its Lessons Learnt from the ASEAN Energy Outlook Development



The ASEAN Energy Outlook (AEO) has become one of the flagship references for policy and planning in the region's energy development, especially in achieving the regional aspirational targets, known as the ASEAN Plan of Actions for Energy Cooperation (APAEC), as well as development towards the ASEAN Economic Community. With the diverse interest of the 10 ASEAN Member States (AMS), the development of the AEO, from edition to edition, has been adjusted to best adapt to the varied Member States' energy landscape, development stages, and other factors considering the global developments.

Supported by the ASEAN-German Energy Programme (AGEP), ASEAN Centre for Energy initiated the Capacity Building on Data and Modelling, targeting, among others, the officials, data statisticians and researchers of the AMS. The capacity building was intended to share the insights about how the ASEAN's data were processed and developed into the outlook modelling;

to improve the understanding of modelling concepts and tools, narrow the knowledge gap, and foster harmonisation/minimise the discrepancy between national and regional forecasts. The activity is very timely with the ongoing development of the AEO 7<sup>th</sup> edition, with which ACE communicates intensely with the AMS.

Back-to-back with the 2nd Workshop of the AEO, the capacity building was held virtually on 25-26 April 2022. The two-day event consisted of live lectures focused on introducing key concepts, software and modelling demonstrations, hands-on exercises to the trainees to gain modelling experience, and Q&A. Participated by around 50 trainees from eight AMS. The capacity building was received positively with further requests such as more training duration, offline training conduct, as well as advanced training for policy integration into modelling. (JM)



# Gender Equality: Why it Matters



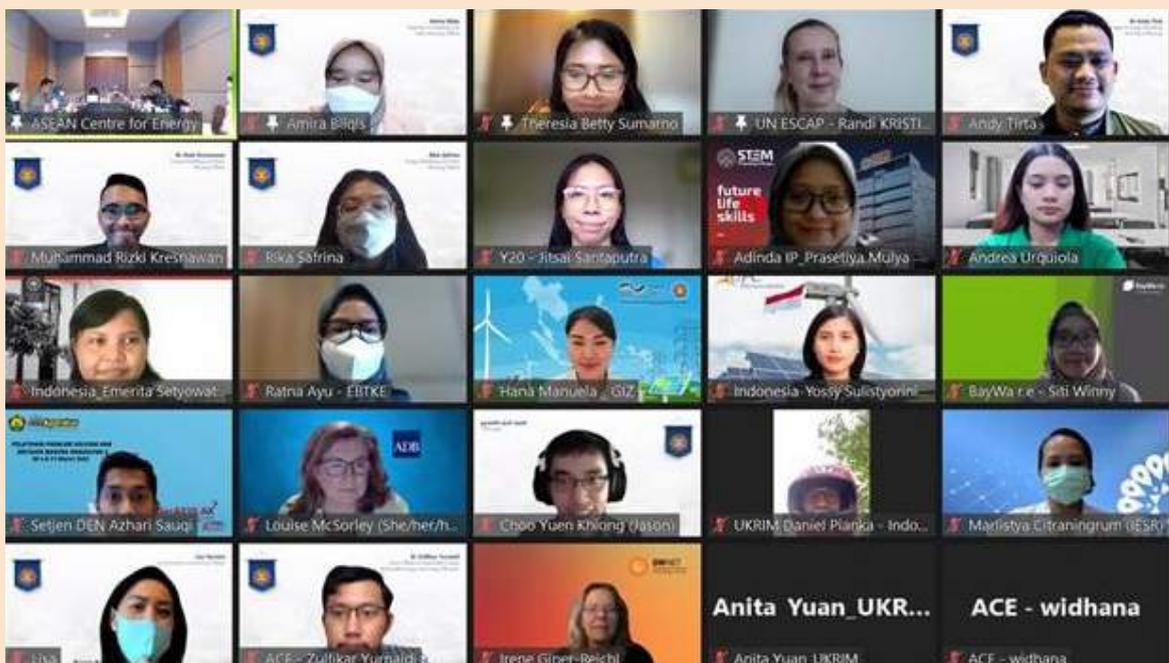
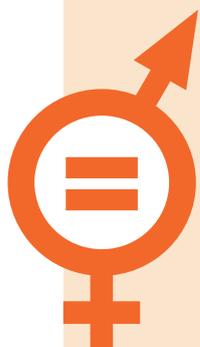
In celebration of 2022 International Women’s Day, the ASEAN-German Energy Programme (AGEP) phase II, a collaborative project implemented by the ASEAN Centre for Energy and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry of Economic Cooperation and Development (BMZ) took part in several initiatives as our commitment in promoting gender equality in energy and implementation of gender mainstreaming in the project.

In March 2021, ACE and GIZ, through AGEP, launched of gender and energy infographic. The project aimed to raise awareness of the projected growth of renewable energy job creation, highlighting the major economic opportunities for women and men in the energy transition journey. We also addressed the key challenges women have faced in managerial positions and technical jobs in this sector. The infographic is available here: <https://agep.aseanenergy.org/lets-breakthebias/>

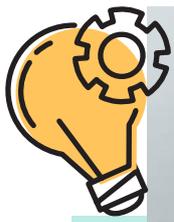
Another engagement made in March 2022 was AGEP’s participation in the workshop on energy-climate nexus, gender, and energy policy, along with Focus Group Discussion (FGD) on 22 March 2022. This workshop was organised by ACE in collaboration with UNEP and

initiated a project to establish guidelines for ASEAN Member States to accelerate renewable energy deployment through ASEAN renewable energy and gender-responsive policy roadmap. Establish a roadmap to integrate gender-responsive policy to expedite RE deployment in Southeast Asia. It will also offer a common policy toolbox on gendered impediments of renewable energy policy by identifying and compiling the latest findings of relevant studies to venture towards more common gender-responsive policy approaches.

Lastly, on a regular basis, the AGEP project also implements another gender mainstreaming measurement, for instance, the collection of gender-disaggregated data to monitor women’s participation in project activity to make sure women and men are equally represented in the decision-making process or multistakeholder dialogue. (HM)



# The Traineeship Story



BY DINI KEMALA



It has been a remarkable opportunity for me to be involved in ASEAN-German Energy Programme (AGEP) Phase II, a jointly implemented programme between the ASEAN Centre for Energy (ACE) and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), from October 2021 to April 2022. During the traineeship programme, I saw how every person contributed to building great teamwork in achieving the project's objective, which is to strengthen ACE's role as a regional competence centre of excellence. The rarity of having physical meetings does not limit the team to maintaining good coordination and keeping the project on track.

The six-month experience has given me beyond my expectations. Being involved in developing the 7<sup>th</sup> Edition ASEAN Energy Outlook (AEO) and renewable energy discussions such as Biogas Study and RE Financing FGD has enriched my knowledge of the energy situation across ASEAN Member States (AMS). The AEO7 development activity has improved my analytical skill and taught me how the extensive data are cooked to produce the most relevant result. While from the FGDs, I noticed the urgency of diversifying renewable energy sources as ASEAN moves to cleaner and more sustainable energy.

I'm amazed that the project is always embedded in the call to action and capacity enhancement. Furthermore, I assisted in preparing the draft infographic to celebrate International Women's Day 2022 by collecting data related to women's status in the energy sector and the challenge faced in entering the energy workforce. As the gender mainstreaming approach is one of AGEP's focuses in the area, I learned the strategies to raise women's participation at the policymaker level.

I am also fortunate to participate in the Effective Report Writing Training from February until April 2022. Through the training, I learned some important elements that should be incorporated into our writing to grab readers' attention and keep them engaged. Not only in writing a report, but this can also be implemented in any written communication, such as writing our work progress or following up a memo to our colleague.

Having an environmental engineering background, I previously viewed energy issues from one lens. Being part of AGEP has taught me that there are varied approaches to solving this issue from social, financial, or policy sides. Moreover, working in a very supportive environment is another blessing in developing my skills. Hopefully, this experience will be a good starting point for pursuing my career in the sustainable energy field. (DK)

**We always look forward to your news and articles on RE & EE. Let's get connected with RE and EE community in ASEAN and beyond!**



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