

# AGER

## ASEAN-German Energy Programme

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A quarterly newsletter that shares know-how, experience and information on renewable energy and energy efficiency & conservation in ASEAN and beyond

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### Editor's Note



#### Dear Renewable Energy & Energy Efficiency Community,

Welcome to the fourth edition of the ASEAN-German Energy Programme (AGEP) Newsletter! We are nearing the end of 2017, and looking back, we realise that AGEP's first year is filled with some significant activities. We have launched our website, the animated video on renewable energy (RE) and energy efficiency (EE), *the 5<sup>th</sup> ASEAN Energy Outlook*, and participated in big events like the ASEAN Energy Business Forum and the German RE and EE Week. Our activities have also been well kicked-off this year, mostly through workshops and trainings. We hope you find this edition useful for your work in RE and EE. Thank you for your support.

*We wish you a Merry Christmas  
and a Happy New Year!*

#### In this Issue:

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# Highlights from **GIZ Renewable Energy and Efficiency Week 2017**

On 9-13 October 2017, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH organised a successful study trip called the Renewable Energy and Efficiency Week (REEW) 2017 in Berlin, Germany. For the third time, the GIZ-ACE jointly implemented ASEAN-German Energy Programme (AGEP) used this forum to exchange knowledge and practical experiences with the ten delegates from ASEAN Member States (AMS); Yim Sohpy (Cambodia), Heang Bora (Cambodia), Xaysavanh Latthachack (Lao PDR), Khamsing Bounyong (Lao PDR), Mohamed Nadhir Zainal (Malaysia) and Keng Sen Koh (Malaysia), Myat Zaw (Myanmar), Ye Lin Win (Myanmar), Le Phu Hung (Vietnam), Doan The Vinh (Vietnam).

The REEW 2017 consists of a three-day expert workshop, one-day energy transition discussion and one-day field trip to Adlershof Technologiepark, Younicos

Technology Center, Grid Lab, Siemens Messgeraetewerk, and Berlin Energy Agency or Inno2Grid. Participated by around 200 experts from more than 30 countries, the event served as a platform to discuss regulatory and technology perspectives, power transformation and future business models of sustainable energy systems. In the forum, participants also discussed the role of private sector and international cooperation to enable framework conditions in achieving a global energy transition.

The REEW 2017 was officially opened on 9 October in Tagungswerk Jerusalemkirche by a representative of The German Federal Ministry of Economic Cooperation and Development (BMZ), Alexander Kauer; Deputy Minister of Energy of Republic of Ghana, H.E. Hon. William Owuraku Aidoo; and Bernhard Zympla from GIZ.

The event was continued with presentation by Patrick Graichen (Agora Energiewende) on strategies for the successful energy transition 2030 and Andreas Kuhlmann (German Energy Agency) on decarbonisation or why linking the electricity, heating and transport sector is vital for accelerating the global energy transition. Apart from them, more than fifteen (15) country delegations, including ACE representative, Badariah Yosiyana, presented their current challenge, direction, and potential cooperation in the area of RE and EE.

At the end of the event, the ASEAN delegates felt the presented experience and success stories from Germany added their knowledge, however they wished the content to be more relevant with situations in developing and emerging countries. Moreover, all of the delegates conveyed their appreciation and satisfaction in participating in REEW 2017. Ministry of Industry of Myanmar, Myat Zaw, expressed, "This event helps our RE and EE projects in Myanmar. We find the knowledge sharing sessions beneficial to our work." (RF)



Credit: GIZ/Alin Pratidina



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Credit: GIZ/Alin Pratidina

# Calculating the Feasibility of RE Projects

As part of the efforts to build a coherent, focused and robust energy policy agenda and strategy for ASEAN, ACE regularly conducts among others capacity buildings for ASEAN Member States (AMS). In this regard, as a joint programme of ACE and GIZ, the ASEAN-German Energy Programme (AGEP) organised a training on “Bankable Calculation, Analysis and Financial Modelling for Sustainable Energy Projects” with a focus on renewable energy (RE) projects. Held in Kuala Lumpur on 15 – 17 November 2017, this training contributed to the programme area of RE under the ASEAN Plan of Action for Energy Cooperation (APAEC), specifically for the outcome-based strategy 4 to increase the promotion of RE financing schemes.

This training provided an in-depth information on life-cycle costing, energy economics, financial language and basics of dynamic economics calculation. It enabled participants to assess their own RE project feasibility by discussing and solving practical case study with an excel-based calculation tool, Quickcalc, which is equipped with a comprehensive analyses feature.

On the first day, Mr. Wong Tin Song, Undersecretary, Sustainable Energy Division of Ministry of Energy, Green Technology and Water, Malaysia (KeTTHA) delivered his opening remark, along with Dr. Sanjayan Velautham as ACE Executive Director, followed by introduction presentation from Maria José-Poddey as Principal Advisor for AGEP, GIZ. This interactive 3-day training was delivered by Energetic Solutions and facilitated by GIZ Germany.

At the end of the second day, a complementary site visit was arranged to Solar Pekat Sdn. Bhd.'s headquarters in order to enhance this training experience with a real example of a successful RE project. Mr. Adam Chew Teik Siang, as the General Manager, delivered a presentation on the feed-in-tariff scheme in Malaysia, and showed the participants a solar photovoltaic of around 102 kWp at their rooftop building. The last day discussion on sensitivity analysis, reporting, marketing and communication of RE financing was also completed with a

Credit: GIZ Indonesia



sharing session and presentation on Green Technology Financing Scheme by Mr. Kamaradzaman Mohd Bakri of GreenTech Catalyst Sdn. Bhd., a subsidiary company under the Malaysia Green Technology Corporation.

This training was successfully concluded with the excellent support, generosity and hospitality of KeTTHA and Sustainable Energy Development Authority, Malaysia. (MW)



Credit: GIZ Indonesia



Credit: GIZ Indonesia

# Project Management 101 for Administrative Professionals

The success of one project can be achieved by applying the project management knowledge and skills in each project stage. The stages in project management include initiating, planning, executing, monitoring and controlling, as well as closing. The knowledge in project management covers the areas of scope, time, cost, quality, human resources, communication, risk, procurement and stakeholder. For example, by defining the project's scope from an early stage, the manager could determine the inputs for executing the project, the tools and methodologies to monitor and control the project, its delivery and outputs.



Credit: IPDC

In most cases, the administrative professionals are involved in all stages of a project. For that reason, it

is important for these professionals to have a good knowledge and skills in project management, so they could contribute to the success of the project.

Three Administration Officers from ASEAN Centre for Energy (ACE) and GIZ have participated in the Project Management training, organised by Indonesia Professional Development Center (IPDC) training institute. The training was held for three consecutive days from 23-25 October 2017 in Yogyakarta. All participants were required to do a pre-test at the beginning and a post-test after completion of all training sessions. The test served to compare the participants' knowledge on the subject before and after the training. In addition, there were also some role plays to show how the participants have learned from the different modules. At the end of the training, each participant received the certificate of training accomplishment. (LT)



Credit: IPDC






Credit: IPDC

## Technical Requirement for Renewable Energy Generation Connected to the Distribution Grids in Indonesia, Malaysia and Thailand

During the 35th ASEAN Ministers on Energy Meeting (AMEM) in Manila in September 2017, the ASEAN Member States (AMS) have again emphasised their intention to advance the transition towards a clean, secure, affordable and sustainable energy future. Two of the key steps are increasing the RE component to 23% by 2025 in the ASEAN total primary energy supply (TPES), and initiating multilateral electricity trade in at least one sub-region by 2018. To help implementing these steps, ASEAN is developing a regional interconnection infrastructure project called the ASEAN Power Grid (APG) under the ASEAN Plan of Action for Energy Cooperation Phase II 2016 - 2025. The

APG is carried out by Heads of ASEAN Power Utilities/ Authorities (HAPUA).

The Report that is soon to be published, *the Technical Requirement for Renewable Energy Generation Connected to the Distribution Grids in Indonesia, Malaysia and Thailand*, was developed with the assistance of international and regional experts to address the renewable energy (RE) technical requirement issues and to counter-measure the challenges of grid-connected RE. The report reviews technical parameters and requirements defined in grid code or interconnection standards for RE power plant in Indonesia, Malaysia and Thailand (see table below).

 <b>INDONESIA</b>	 <b>MALAYSIA</b>	 <b>THAILAND</b>
<p>1. Guideline for Connecting Renewable Energy Generation Plants (REGP) to PLN's Distribution System - 2014</p> <p>Issued by Perusahaan Listrik Negara (PT. PLN)</p>	<p>1. Technical Guidebook for the Connection of Generation to the Distribution Network -2005</p> <p>Issued by Tenaga Nasional Berhad (TNB)</p>	<p>1. Electrical Network Connection Requirements for SPP – 2014</p> <p>Issued by Electricity Generating Authority of Thailand (EGAT)</p>
	<p>2. Technical Guidebook on Grid-interconnection of Photovoltaic Power Generation System to LV and MV Networks - 2012</p> <p>Issued by Tenaga Nasional Berhad (TNB)</p>	<p>2. Electrical Network Connection Requirements for VSPP - 2015</p> <p>Issued by Metropolitan Electricity Authority (MEA)</p> <p>3. Electrical Network Connection Requirements for VSPP – 2016</p> <p>Issued by Provincial Electricity Authority (PEA)</p>



Credit: ACE

The report also provided recommendations to ensure the different characteristics of RE power plants do not adversely affect the grid stability and power quality. The analysis could then be used as a reference for stakeholders (i.e. regulator, independent power producers, utilities and grid operators) to develop RE power plants and integrate the power to the grid. (RF)

# AGEP Supports ACE Enhancement

As part of its effort to support ASEAN Centre for Energy (ACE) in executing its roles as a think tank, catalyst, as well as data centre and knowledge hub in ASEAN energy sector, AGEP set up an organisational development activity under its programme. The activity's objective is to enhance ACE's capacity through institutional development by identifying existing challenges. The Netherland-based MDF Training & Consultancy has been chosen to facilitate this activity until March 2018. The kick-off meeting for this activity was held on 3 November 2017 with three consultants from MDF explaining the expected process and procedure to all ACE staff. The activity was very welcomed by ACE and AGEP's support is highly appreciated.



Credit: ACE



Credit: ACE



Credit: ACE



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**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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