



Concept Note

ACE-AFEO Network on Renewable Energy (RE) Research & Development (R&D)

1. Background

ASEAN Centre for Energy (ACE) is an intergovernmental organisation within the Association of Southeast Asian Nations' (ASEAN) structure that represents the 10 ASEAN Member States' (AMS) interests in the energy sector. It is guided by a Governing Council composed of Senior Officials on Energy leaders from each AMS and a representative from the ASEAN Secretariat as an ex-officio member. Hosted by the Ministry of Energy and Mineral Resources of Indonesia, ACE's office is located in Jakarta.

ACE is working towards the implementation of ASEAN Plan of Action for Energy Cooperation (APAEC), a series of guiding policy documents to support the implementation of multilateral energy cooperation in ASEAN. One of the seven (7) programme areas of APAEC is Renewable Energy (RE) Programme, which has strategic action plan to empower the ASEAN Research & Development (R&D) network on RE. RE plays a key role in delivering a sustainable energy future. It enhances energy security, decreases dependence on imported fuels and contributes to climate change mitigation by reducing carbon dioxide (CO2) emissions. In the ASEAN region, there are significant potentials for the use of RE, and AMS have stepped up their effort in developing national RE programs.

In developing RE, R&D plays an important role in improving existing & innovating new technologies. To support this concern, the ASEAN-German Energy Programme (AGEP) - a jointly implemented project by ASEAN Centre for Energy (ACE) and Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ) GmgH on the behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) has recently conducted a study on mapping R&D on RE in ASEAN to understand R&D policies, stakeholders, and its role on fulfilling energy demand through RE in ASEAN. In this study, it is found out that there is still low collaboration and communication between RE R&D stakeholders among AMS, which consisted of Government, practitioners (University, Research Institutes), and Private Institutions. These have resulted in the lack of synchronization between the policies on R&D and policies RE, lack of direction for R&D practitioners, and difficulties for private sectors to implement the resulting R&D products. Furthermore, the resources of R&D between AMS are vary greatly, with some in the early stage and some in the developed stage.

One of the ways forward that ACE deemed necessary to improve on this condition is to build a platform which the stakeholders can conduct joint discussion, exchange knowledge, and sharing of perspective on RE to improve on the RE in their respective country, and ultimately ASEAN region. As ACE currently has networks on ASEAN Energy Ministry, this initiative aims to propose the establishment of network on R&D practitioners within ASEAN, with particular focus on engineering and policy as the driving force of RE. ASEAN Federation of Engineering Organisations (AFEO) is one of the potential Partner for ACE to build and open access to the RE R&D engineering institutes in region, which include universities and research institution. ACE and AFEO are the ASEAN Entity







which could collaboratively work together to improve capacity building, conduct research and provide study recommendation to the ASEAN Policy Makers with regards to RE R&D.

2. Objectives

This initiative is intended to establish a network of R&D practitioners, which provide platform for collaboration and joint-effort to enhance knowledge & expertise on RE technology and policy for ASEAN region.

3. Scope of Work

For the initial stage, the scope of the network will be:

- a) Designation of RE R&D-related institution of professional engineering focal points for each AMS.
- b) Design and provide exchange platform on knowledge and research opportunities between the members (e.g. workshop, seminar, guest lecture, online database).
- c) Provide reference for peer-review on relevant topic.
- d) Hold regular discussions for future activities of the network.

4. Stakeholder

ACE & AFEO will be the lead of the network, while prospective members will consist of RE R&D-related institute of professional engineering, which may include universities or research institutions from all AMS. RE specialties of prospective member include, but not limited to science, technology, engineering, energy-economic and policy.

There will be possibilities in the future to enhance the network reach to include research bodies of government, private institution, and other regional/international bodies, e.g. ASEAN University Network (AUN), ASEAN Foundation (AF).

5. Prospective Outcomes from Both Parties

For the initial stage, the expected outcomes are:

- a) Focal Points list and their scope of task for this network.
- b) Joint-research project/study in the form of paper, report, etc.
- c) Events inviting members, institute of professional engineering focal points, and ACE's network (AMS energy ministries, International Organizations on energy)

Future possibilities:

- a) Exchange on researchers or students among different AMS.
- b) Initiate student chapters with multidisciplinary interest.
- c) Collaborate with donor to provide R&D fund for members of network.







6. Contribution

ACE

- a) Provide opportunity for internship/fellowship/job vacancy.
- b) Provide project opportunity for network members with relevant expertise.
- c) Provide access of data pool, information, and study on energy. Current available resources from ACE include ASEAN Energy Database System (AEDS) and regular News Clipping for energy in ASEAN.

AFEO (Energy Sector)

- a) Provide and invite prospective members from each institute of professional engineering focal point to join the network, including universities and other R&D institutions.
- b) Support in the engineering context to ACE as think tank firm; e.g. code of practice in energy or harmonization in standard.

Both parties (ACE & AFEO)

- a) Assign a contact point representative for the network
- b) Promote events or publications held by ACE, AFEO, or other members through each institution's internal and external communication platform
- c) Provide reference of relevant experts (academician or professional) to help in peer review. Reviewer will have added benefit of being put into acknowledgement section.

7. Indicative Timeline

- Discussion on activities between 24-26 April 2019 or earlier through video conference.
- Signing on Letter of Intent* on or before the week of 20-24 May 2019 between representatives of ACE and AFEO.
- Further activities after AGEP Phase II project will be discussed on a tentative date between Q3 or Q4 2019.

8. Implementation and Budget

- The terms for implementation of each activity or programme shall be mutually agreed upon and communicated by both parties
- The expenses incurred for the implementation of each activity will be discussed case-bycase, with possibility of seeking joint-funding on joint-programme.

^{*}As ACE and AFEO are both ASEAN bodies, formalization will not be in the form of MoU.







9. Contacts

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