

# AFEO Annual Meeting 2019 Energy Sector

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# Introduction



- Thailand energy situation (as of Jan May 2019)
- Progress of networking with ASEAN Centre for Energy (ACE)
  - Draft renewable energy networking
  - Future move

# **Overall Thailand energy system**

As of Jan-May 2019



952 thousand bbl/day\*

Thailand energy production of condensate, natural gas and hydropower increased while energy production of crude oil and lignite decreased. Primary energy Import (net)



**1,497** thousand bbl/day \* Import more in all energy type except electricity decrease at 6.9%



#### 2,172 thousand bbl/day \*

Decrease in consumption of coal, Lignite, hydropower/imported electricity while consumption of oil and natural gas increased.

Decrease in all final energy consumption ; Oil still has highest proportion at 56% followed by electricity at 22%.



## Final commercial energy consumption: Thailand 2019





Source: Energy Policy and Planning Office (EPPO)

### **Energy Intensity**



Energy Intensity : EI = Final Energy Consumption : FEC / GDP

GDP : chain volume measures (reference year = 2002) from NESDB





- Renewable energy (Research & Development) Nodal Networking with ACE
  - Objectives & scope of work
  - Contribution btw ACE & AFEO
  - Timeline

(pls see following slides)

# (Draft) Memorandum of Cooperation (MoC) for Renewable Energy Nodal Network)

#### **OBJECTIVES**

• This MOC is intended to establish a network of Research & Development (R&D) practitioners, which provide collaboration to enhance knowledge & expertise on Renewable Energy (RE) technology and policy for ASEAN region

#### **SCOPE OF WORK**

For the early stage, the scope of the nodal network will be:

- Designation of RE related institute of professional engineering focal Points for each country .
- Design and provide exchange platform on knowledge and research opportunities between the members (e.g. workshop, seminar, guest lecture, online database)
- Provide reference for peer-review on relevant topic.
- Hold regular discussion for future activities of the network

#### **STAKEHOLDER**

- ACE & AFEO will be the main organizers, while prospective members will consist of RE-related institute of professional engineering from all the ASEAN. RE specialties of prospective member include, but not limited to: science, technology, engineering, energy-economic and policy.
- In the future, there will be possibilities to enhance the network reach to include research bodies of government, private institution, and other regional/international bodies (e.g. AUN, AF)

#### **PROSPECTIVE OUTCOMES FROM BOTH PARTIES**

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

#### Future possibilities

- Exchange on researchers in member focal points
- Initiate student chapters with multidisciplinary interest
- Collaborate with donor to provide R&D fund for members of network
- Initiate a secretariat as a governing body of the network

#### **CONTRIBUTION: ACE**

- Provide opportunity for internship/fellowship
- Provide project opportunity for network members with relevant expertise
- 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

#### **CONTRIBUTION: AFEO**

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

#### **CONTRIBUTION: Both parties (ACE & AFEO)**

- Promote events or publications held by ACE/AFEO/member through each institution's internal communication platform
- Provide reference of relevant academician or professional to help in peer review. Reviewer will have added benefit of being put into acknowledgement section.

#### **ACTIVITY TIMELINE (IF ANY)**

 Prof Wongkot (EIT), as coordinator and initiator of this MoC), has discussed with ACE for two times in April 2019 through video conference.

 $\rightarrow$  ACE is co-draft this MoC.

 Signing of formalization document\* before week of 20-24 May 2019 (Date will be fixed again) between ACE and AFEO.

→ ACE provide two (2) airfare and accommodation for two AFEO representative to sign/coordinate this MoC in Danang.

\*As ACE and AFEO are both ASEAN bodies, formalization will not be in the form of MoU

Comment; pls send to wongkot@eng.cmu.ac.th

# **Meeting with ACE Director**

- Tomorrow (Friday 13<sup>th</sup> September) with ACE Executive director at ACE office (09:00-11:00 AM)
- Focus on the framework of cooperation according to the draft MoC
  - Activities on the ACE data pool sharing to AFEO members
  - How members from each of our AFEO institute of professional engineering to join the RE network
  - Future on the cooperation projects on RE (e.g. new project or new publications including the ASEAN technical papers, etc.)



# Thank you

