



**Project of “Promotion of Biomass Energy for Agricultural Communities and Rural Development in ASEAN Region”**

# Guide on the development of pilot models of the project in ASEAN member countries

Dr. Luong Huu Thanh, IAE/VAAS

Hanoi, 14-15 May 2019

# 1. Determine the objectives:

- The pilot model must be consistent with the overall goal of the project: using biomass energy
- The use of biomass energy, especially from waste agriculture is not only useful in providing energy and reduce input costs but also minimize the negative impact of the agricultural production, agricultural processing to the environment.
- ASEAN countries need to review the bio-energy consumption; building pilot models use of biomass energy and promoting applying of the pilot models, as well as appropriate technologies to contribute to the region's agricultural and rural sustainable development.

- After being treated, agricultural waste can create new energy such as biogas, biochar, energy pellets... so we need to research how to use these renewable energy sources instead for fossil energy, DO, electricity...
- Analyzing people's energy use needs in daily life and agricultural production to determine how to use of biomass energy to enhance its value.

## **2. The activities needs to be deployed:**

- Analysis the current situation, needs and potentials of applying techniques for pilot models: survey and evaluate the possibility of using biomass energy to replace traditional energy.
- Design or improve equipment suitable for the operation of biomass energy economically and environmentally
- Test operation of the system using biomass energy and ensure a stable operation of the system

### **3. Building a pilot model:**

- Select the location to build the model: Select the farm or households are eligible to participate in the pilot model
- Location should be near to the agricultural waste resources
- Farm or household has activities to create biomass energy or has need to use biomass energy

### **3. Building a pilot model (2) :**

- Installing equipment and operating equipment: training for users
- Advisory services should be build for sustainability
- Evaluate the economic, social and environmental efficiency of the model.
- Communication of the results of modeling through workshops, visits, the ASEAN biomass energy website and the media.

## Content of a pilot proposal to project management board

1. Name of pilot model
2. Timing: 2019
3. Background/Rational
4. Objectives
5. Technological solutions
6. Activities and detail schedule
7. Expected outputs
8. Pre-Evaluation of economic, environmental and social impacts
9. The capacity of realization organization
10. Proposed budget according to JAIF guideline

## **4. Expected outputs the pilot model**

- The narrative of pilot model report
- Communication products: training materials, ppt, articles, video clips to be shared in ASEAN biomass energy website
- Policy brief of the country about and ASEAN policy on biomass energy
- Financial report of pilot model



Thank you for your listening!