

Multi Fuel Policy Development for Solid Biomass Utilization and Capacity Building Plan for EEP Mekong Countries

Project Objective

The overall objectives of the project are:

- To explore the possibilities of using several alternative biomasses as fuels in new biomass power plants in the region to enhance the use of resources and increase energy efficiency;
- To report the restrictions for arable land usage in non-food biomass production;
- To find out the obstacles for biomass utilization and energy entrepreneurship in all EEP Mekong countries;
- To identify the biomass energy clusters in EEP Mekong countries and find possible synergies;
- To develop plans for capacity building and education on multi fuel biomass usage policy development for the region;
- To promote the benefits of entire life cycle efficiency of modern technology.

Description

Solid biomasses are not fully utilized in EEP Mekong Countries. This could be due to energy policy and the tradition of producing electricity using centralised big power plants and fossil fuels. This project challenges and discusses the consideration of other energy production philosophy and strategy of distributed energy production (or island production) using multi-fuel biomasses. The project will have the following outputs:

- Biomass potential known in EEP Mekong countries and elephant grass and/or it's hybrids potential estimated;
- Obstacles of land use for non-food biomass production reported;
- Reed canary grass combustion experiences benchmarked so that the anticipated challenges in elephant grass combustion could be estimated;
- Supply chain of reed canary grass and energy entrepreneurship legislative and agreement framework benchmarked;

Project Highlights

Project ID	: 2-R-074
Country	: Regional
Lead Partner	: Wiltrain Consulting Oy
Partners	: Prince of Songkla University, VTT Technical Research Centre of Finland, ENERTEAM, Jyväskylä University, STFE Co. Ltd., National University of Laos, COMPED
Total Project Cost	: € 204,500
EEP Financing (% to total project cost)	: € 189,500 (92.6%)
Technical Focus	: Biomass, Bio-fuels
Activity	: Capacity, Feasibility, Pilot
Duration	: 18 months



- Full Scale Combustion Research Facility (FSCRF) technically specified, business model developed and bankability presentation material prepared and tested with investors.

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Relevance to the Region's Energy and Environment Policies

The project will promote the use of biomass for electricity generation which is in-line with the Thai government's policy to increase the share of renewable energy from 10.6% in 2011 to 14.1% in 2017-2022.

The project has positive impact on the environment as it promotes the use of solid biomasses which are commonly found in EEP Mekong countries and that can be used as fuel for energy generation thus reducing the region's dependence on fossil fuels.

Innovation and Knowledge Transfer

For technology and knowledge transfer from Finland, the plan is to build train-the-trainers type program of exchange lecturers, researchers, post graduate students and technical experts.

For technology transfer and adaptation for local condition we specify a full scale multi-fuel biomass combustion research facility for the entire region which will be located at Prince of Songkla University in Hat Yai. Financing model alternatives e.g. PPP (Public Private Partnership) for investment is part of the project.

For more information:

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