

**PROJECT:**

Promoting Household Energy Conservation through Feedback Services and Home Energy Audit on Residential Sustainable Lifestyle Programs in **Thailand**



Implementing entity:
Provincial Electricity Authority (PEA), Thailand



Project partners:
ENSOP; Jyukankyo Research Institute Inc. (JYURI)



Amount:
Budgeted: USD349,218
Spent: USD349,218



Duration:
01.06.2018 – 31.07.2019

**Project objective:**

The objective of the project is to encourage a behavioural change of the residential households in Thailand to a sustainable, energy-saving lifestyle. The objective is reached through a set of inter-connected activities:

- Establishing household energy consumption database;
- Implementing two pilot projects among the same set of pilot households: (1) providing energy consumption feedback service and (2) conducting home energy audits;
- In parallel, developing of software, which is capable of generating the feedback report, the home energy audit report, as well as evaluating the program's effectiveness;
- Through the abovementioned feedback service and home energy audit, customized energy-saving advices will be provided to consumers, encouraging them to become conscious of energy-saving related issues which have possibly been unnoticed.

Project status: Completed

01

Database of household energy consumption as well as a market survey on household electrical appliances in four provinces have been completed.

02

Based on the above, a software to analyse and assess household electricity consumption and creating feedback report has been developed. It was tested on 50 sample households. 68% of the sample group found the feedback services useful.

03

Home energy audit tool has been developed. The tool is the first step in assessing how much energy a household consumes and to evaluate measures to be taken to improve energy efficiency and reduce CO₂ emissions.

04

Trainings of local home energy auditors were conducted with the audit reports provided to 50 sample households.

05

More than 90% of the respondents viewed that the home energy audit reports are useful, easy to understand and encouraging for implementation of energy efficiency measures.

06

With the assumption that the feedback service continues after the end of this project and that the target households per region are expanded, the reduction effects are estimated at 2.5 tCO₂/year for Samut Sakhon, 2.4 t-CO₂/year for Nakhon Pathom and Pathum Thani, and 2.3 tCO₂/year for Phuket. Meanwhile, the reduction effects for home energy audit are estimated at 3.39 tCO₂/year for Samut Sakhon, 3.62 tCO₂/year for Nakhon Pathom, 1.38 tCO₂/year for Pathum Thani, and 0.38 tCO₂/year for Phuket