



FINLAND FUTURES  
RESEARCH CENTRE



Erasmus+

# ENERGY DEMAND ESTIMATION EXERCISE

DEVELOPMENT OF ENERGY EDUCATION IN  
THE MEKONG REGION (DEEM)  
THIRD TRAINING

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# OBJECTIVES

- ✓ LEARN TO ESTIMATE ENERGY DEMAND OF VILLAGES
- ✓ UNDERSTAND DAILY DEMAND PROFILES AND LOAD CURVE FOR A VILLAGE
- ✓ LEARN TO CONSTRUCT FUTURE ENERGY DEMAND ESTIMATIONS
- ✓ LEARNING BY DOING ON CASE STUDIES
- ✓ OPTIMISING POWER SYSTEM WITH THE HELP OF HOMER (NEXT TRAINING)

**2 CASES:**

**FISHVILLE**

**REMOTEVILLE**

**TASK 1- DETERMINE  
THE MOST COMMON  
ELECTRIC  
APPLIANCES  
RELEVANT TO YOUR  
CASE EXAMPLE**

**TASK 2- ESTIMATE  
ELECTRICITY  
CONSUMPTION OF  
APPLIANCES & HOW  
MANY HOURS PER  
DAY THEY ARE USED**

**TASK 3- DETERMINE  
WHEN APPLIANCES  
ARE USED TO  
CREATE A DAILY  
DEMAND PROFILE  
AND A LOAD CURVE**

# **TASK 4- FUTURE ENERGY DEMAND ESTIMATION**



**TASK 5 - BASED ON  
CURRENT SITUATION  
AND THE LOAD  
CURVE, ESTIMATE  
POTENTIAL OPTIONS  
FOR POWER SYSTEM  
CONFIGURATION**



**QUESTIONS,  
COMMENTS?**

**TASK 6 – PRESENT  
YOUR CASE &  
EXPLAIN HOW THE  
TEAM REACHED TO  
THE RESULTS TO  
THE REST OF THE  
AUDIENCE**

**TASK 7- INPUT THE  
INFORMATION TO  
HOMER TO OPTIMISE  
THE POWER SYSTEM  
FOR YOUR CASE**

# Thank you



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