

# Solar Powered Boat (Tourism boat and fisherman boat)

ELECTRICAL ENGINEERING - FACULTY OF ENGINEERING  
**SOEGIJAPRANATA CATHOLIC UNIVERSITY**



FLORENTINUS BS, SLAMET RIYADI, LEONARDUS HP, ARIFIN W  
f.budi.s@unika.ac.id



With the support of the  
Erasmus+ Programme  
of the European Union



03/11/2020

Copyright © eACCESS



With the support of the  
Erasmus+ Programme  
of the European Union



# Introduction

## 01 Background

Photovoltaic → electrical energy by utilizing solar energy.

Available in large quantities, environmentally friendly, obtained free of charge and can be renewed continuously.

## 02 Situation Analysis

Tourist village area of Kandri, Central Java → boat tour of Jatibarang Reservoir.

Remote Area in Indonesia, especially East Indonesia → fisherman boat

## 03 Problem

Use of fuel in the operation of tourist boats → water pollution on Jatibarang reservoir

Fuel availability in East Indonesia → poor supply of fuel

03/11/2020

Copyright © eACCESS

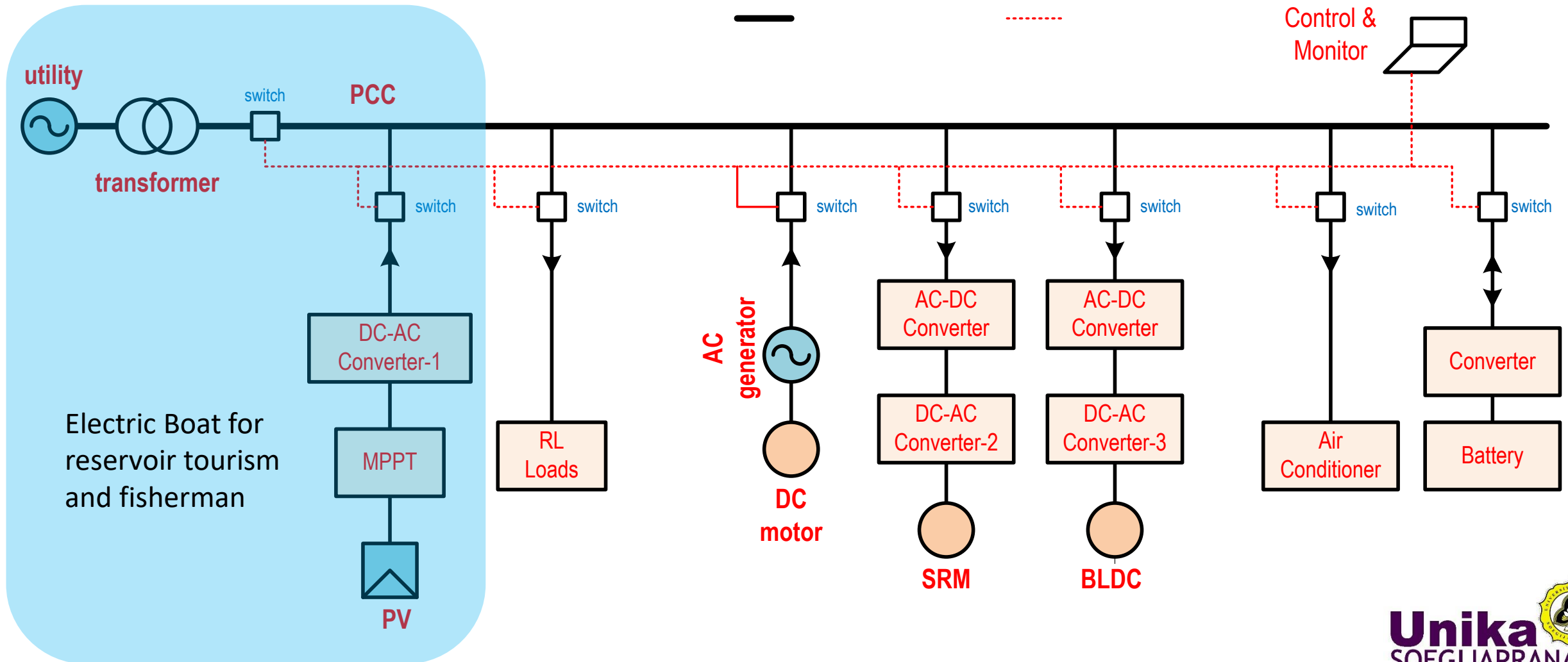




With the support of the  
Erasmus+ Programme  
of the European Union



# SCU eACCESS Project





Electric Power  
Grid 220V/50Hz

SCU  
Lab

Solar Power  
Plant (field)

Jatibarang Reservoir

Remote Area

Potovoltaic

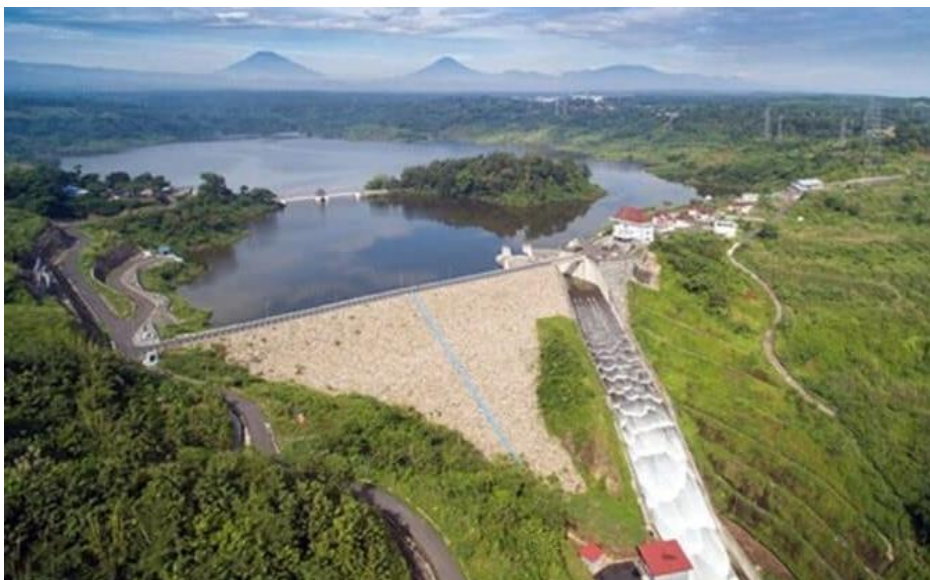
battery

Boat





With the support of the  
Erasmus+ Programme  
of the European Union



Jatibarang Reservoir, Semarang, Indonesia



03/11/2020



Larangan Beach, Central Java, Indonesia



Copyright © eACCESS





**Photovoltaic**



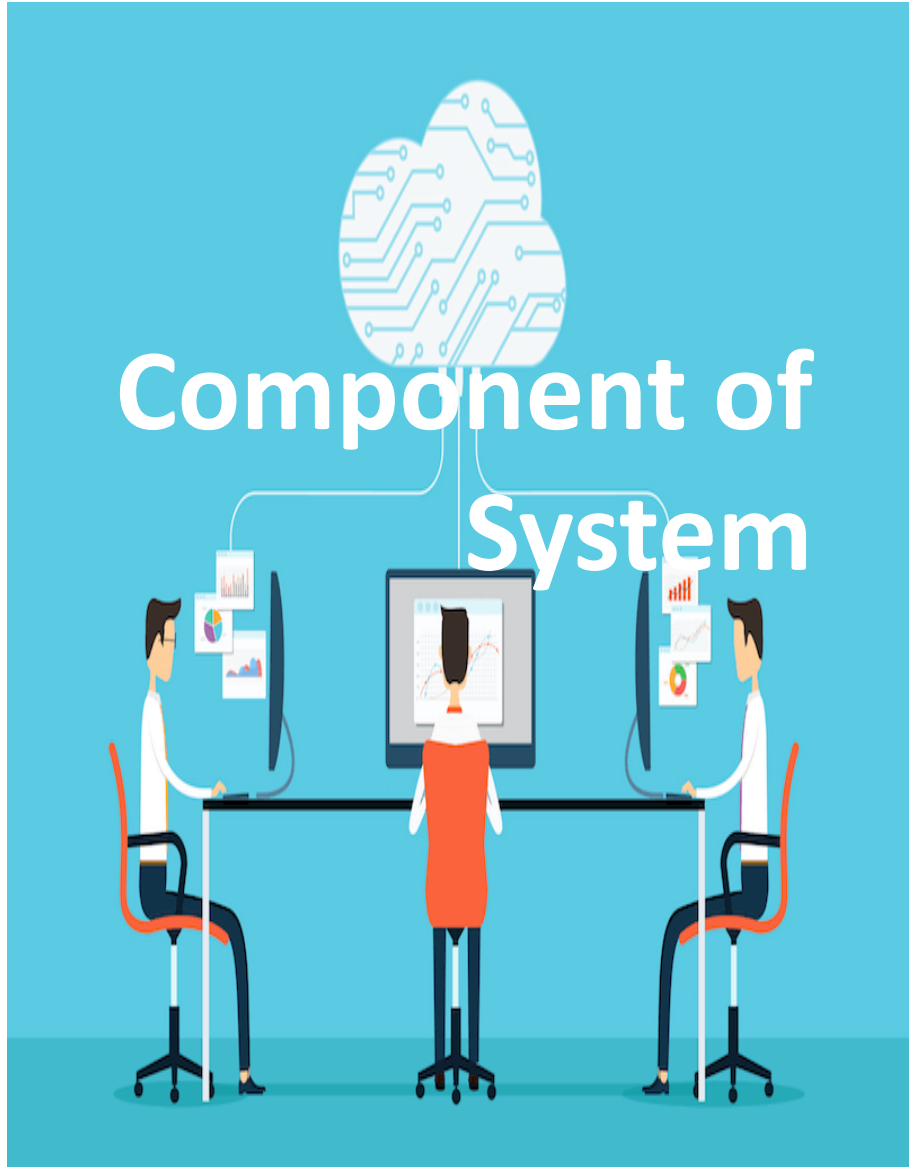
**Battery**



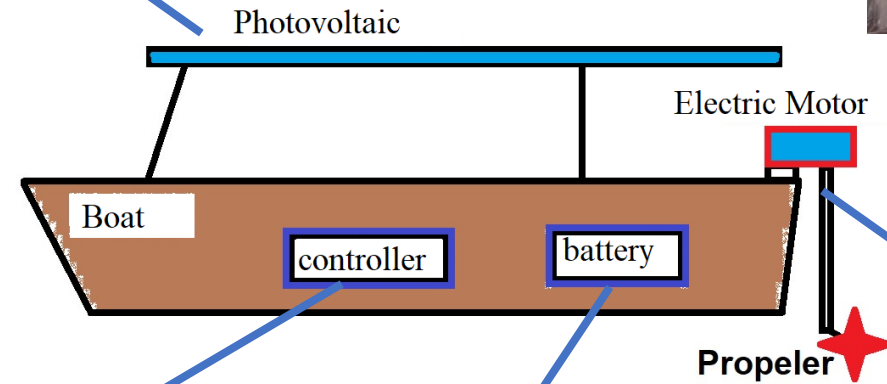
**Charge Controller**



**Electric Motor**



**Component of  
System**





## 01 Solar Power System

able to replace fuel-based systems, especially for tourist boats.

## 02 Feasibility

feasible to be applied with a maximum investment return period of 2 years, feasible for fisherman

## 03 Suggestion

further improvement are to make an automatic system that is more efficient in order to obtain the necessary power and electricity