

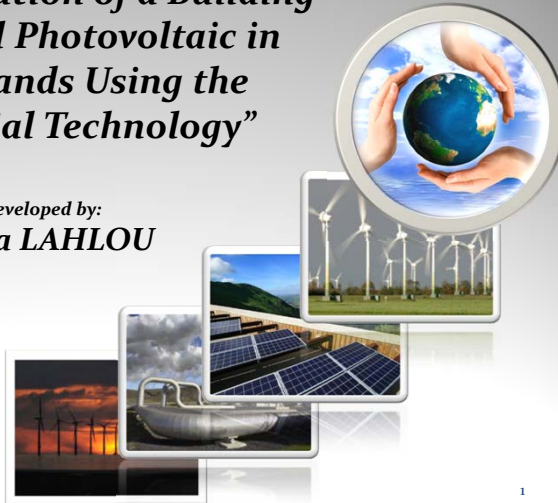


# “Implementation of a Building Integrated Photovoltaic in Urban Lands Using the Geospatial Technology”

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## summary

### ❖ Introduction

- > Background
- > Problem Statement
- > Primary Objectives
- > Areas of study

### ❖ Proposed Solution

#### ❖ Methodology

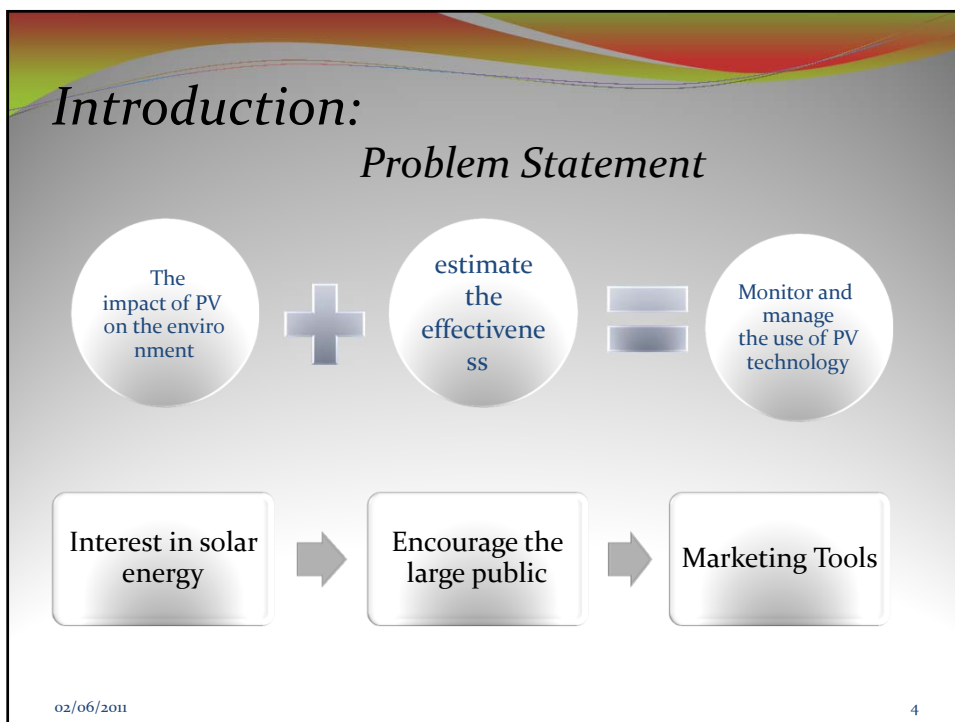
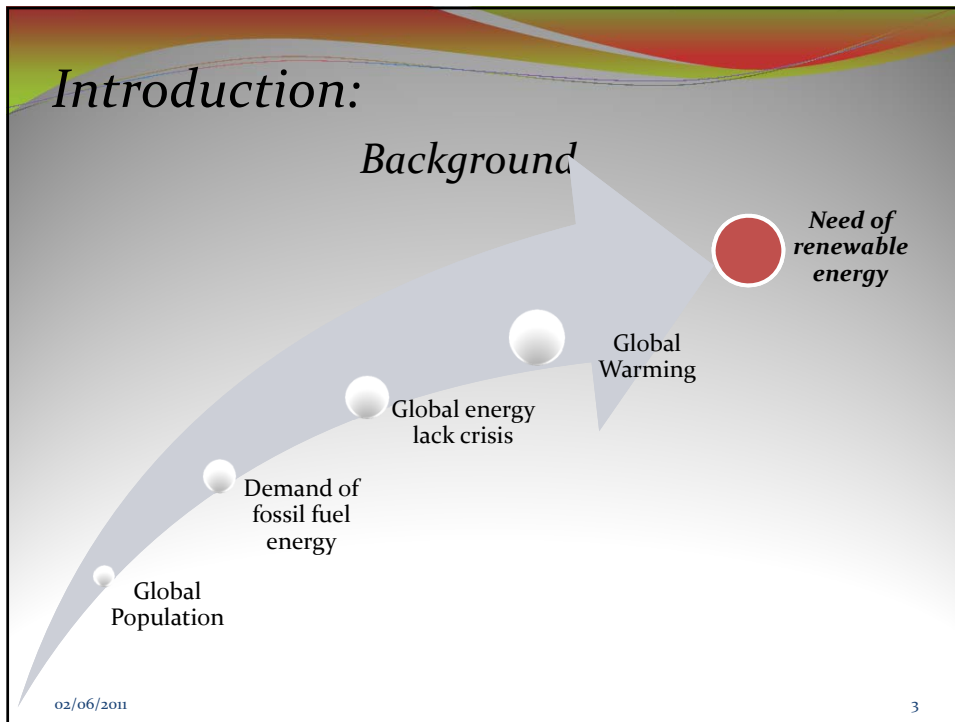
- > Part one: Mapping of solar radiation
- > Part Two: determine the eco-friendly locations to implement the photovoltaic solar panel
  - > Data
  - > Mapping of solar radiation
  - > Electric energy generated
  - > Ecofriendly location
- > Part three: Presentation of these Data using web Mapping application

### ❖ Results and analysis

### ❖ Conclusion and recommendations

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# Introduction:

## Primary objectives



Decisions makers

- Best production of electrical energy;
- Management and control of use of solar panels



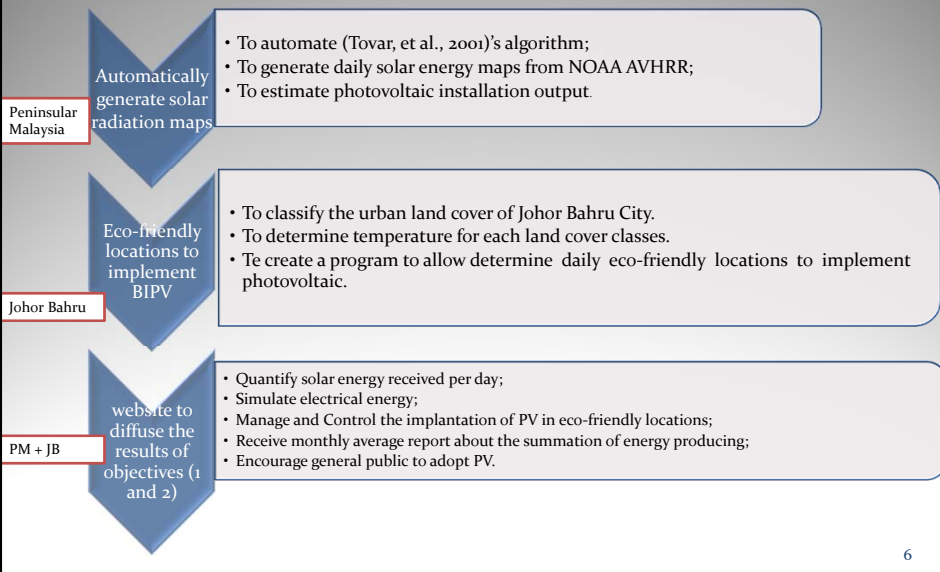
Environment

- Implantation of solar panels in urban areas while respecting the environment;

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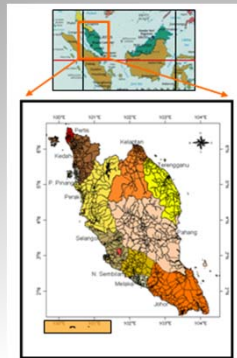
# Aim & Objectives



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# Introduction:

## Area of study



Peninsular Malaysia



City of Johor Bahru

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# Methodology:

## Remote sensing

Envi, PCI, Matlab.

First part

Mapping of received solar energy

Second part

Mapping of environmentally areas for the location of solar panels

## Web Mapping

MapServer, PHP, Javascript, MySQL...

Third part

Creating a website for managing the use of PV based on the results of Remote Sensing part ( ).

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# First Part Mapping of solar radiation

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## Methodology: Solar Radiation mapping

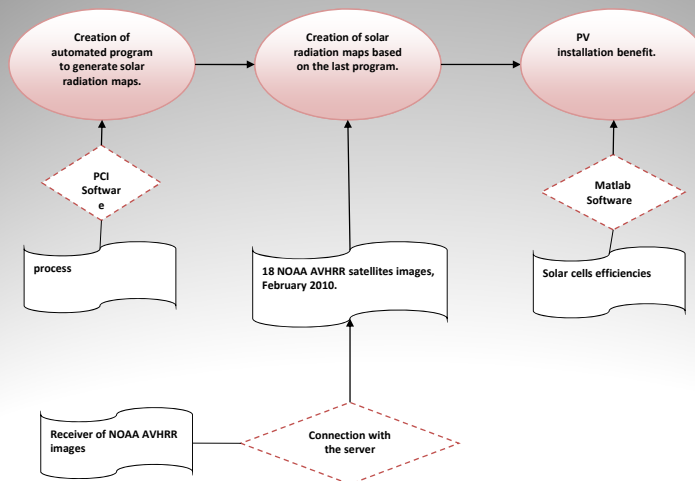


Fig6: Main Framework

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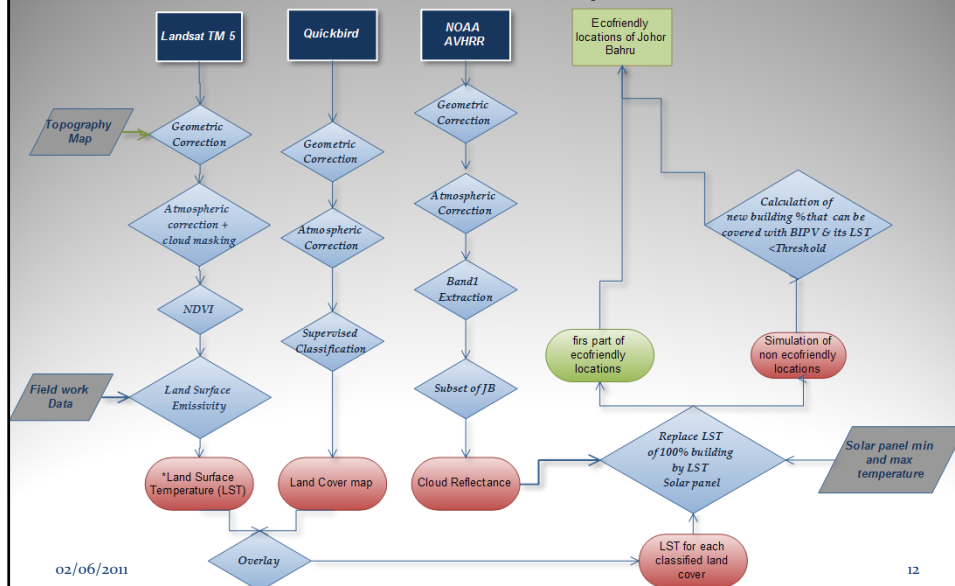
## Part Two mapping eco-friendly areas

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## Eco-friendly locations

Flowchart to determine ecofriendly locations



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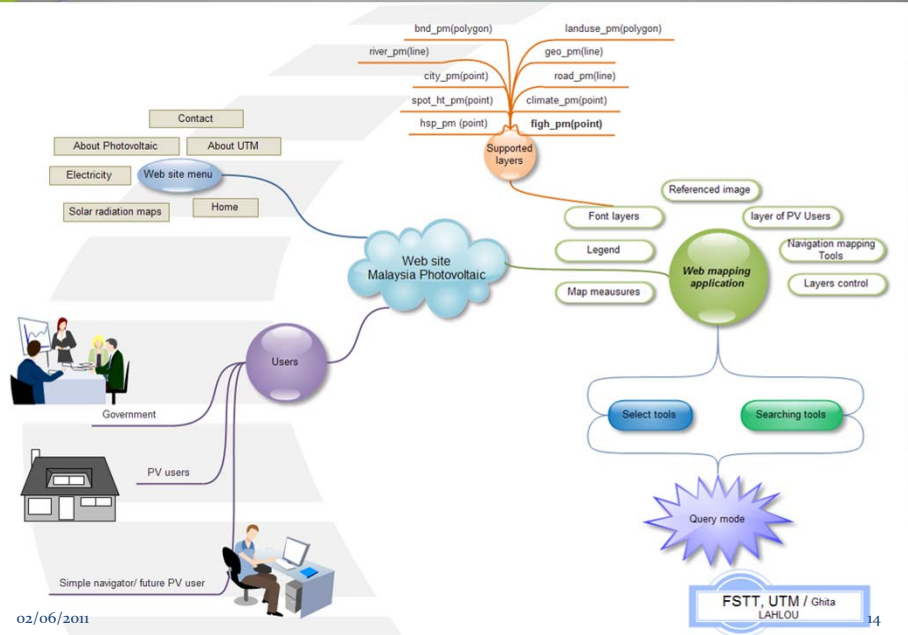
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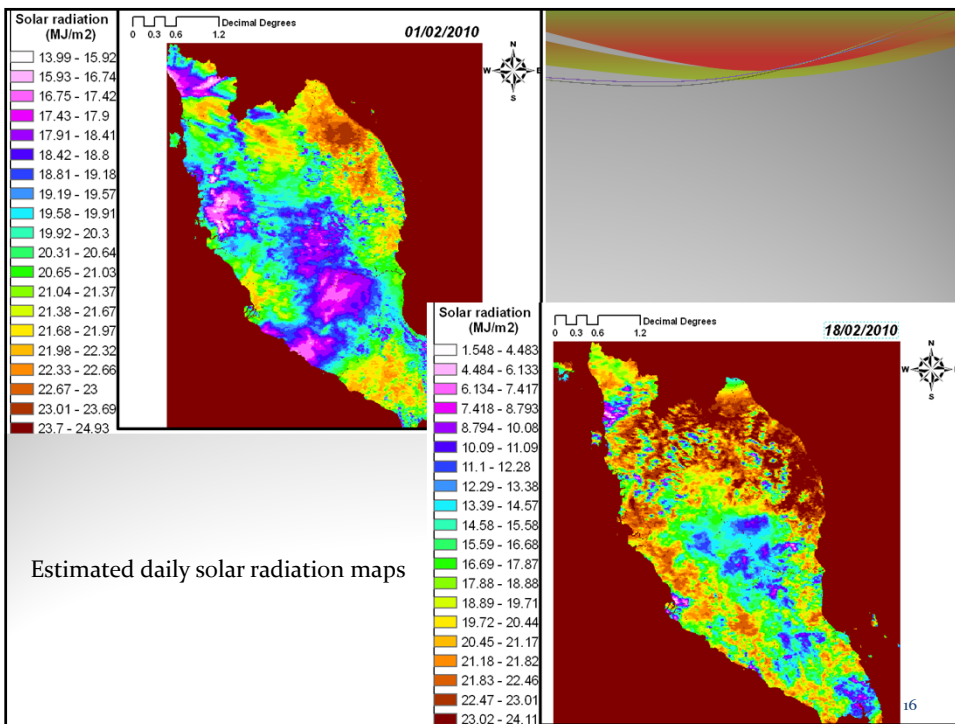
# Part Three Web Mapping Application

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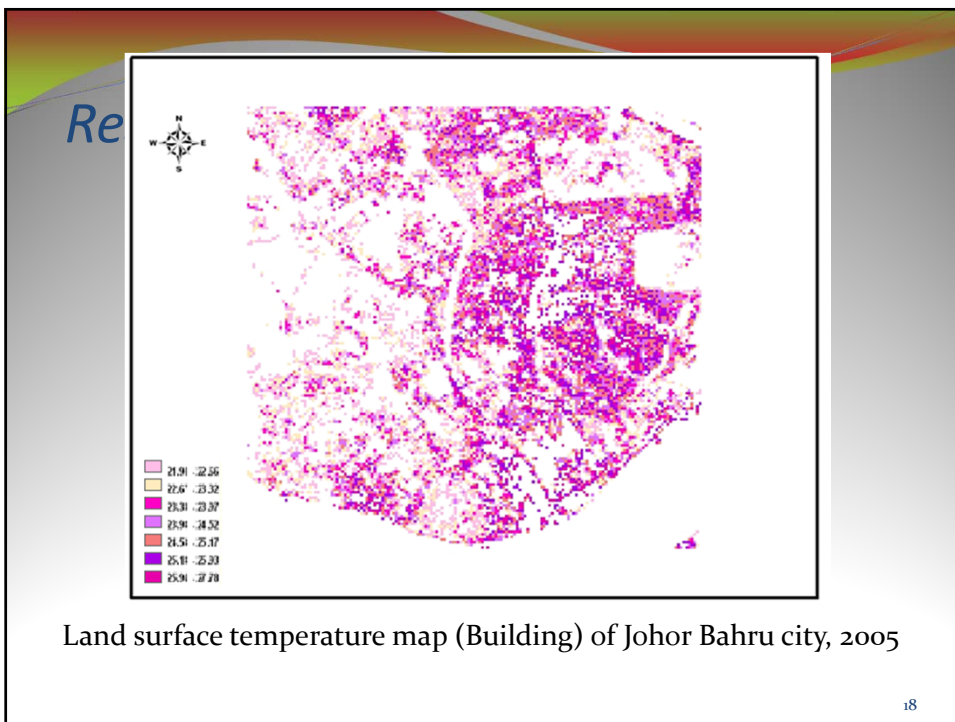
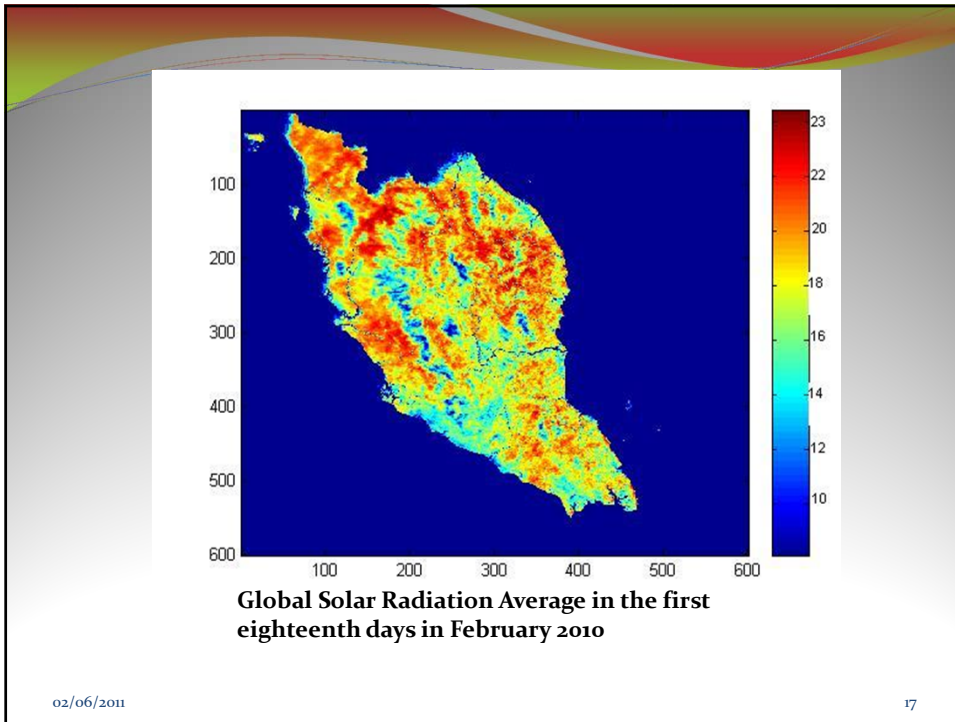
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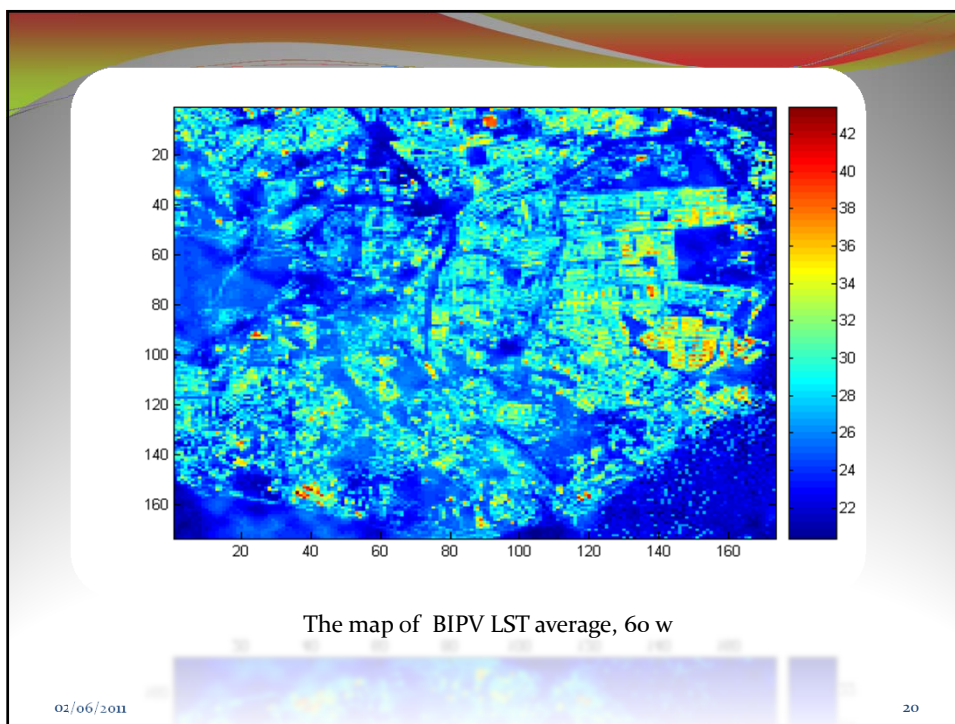
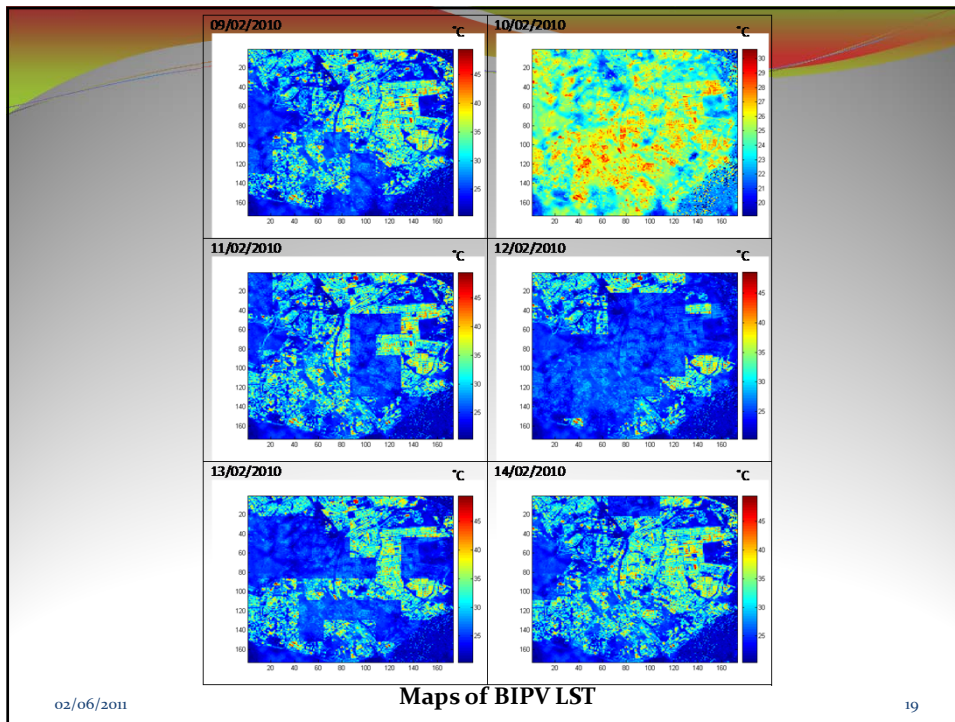
## METHODOLOGY

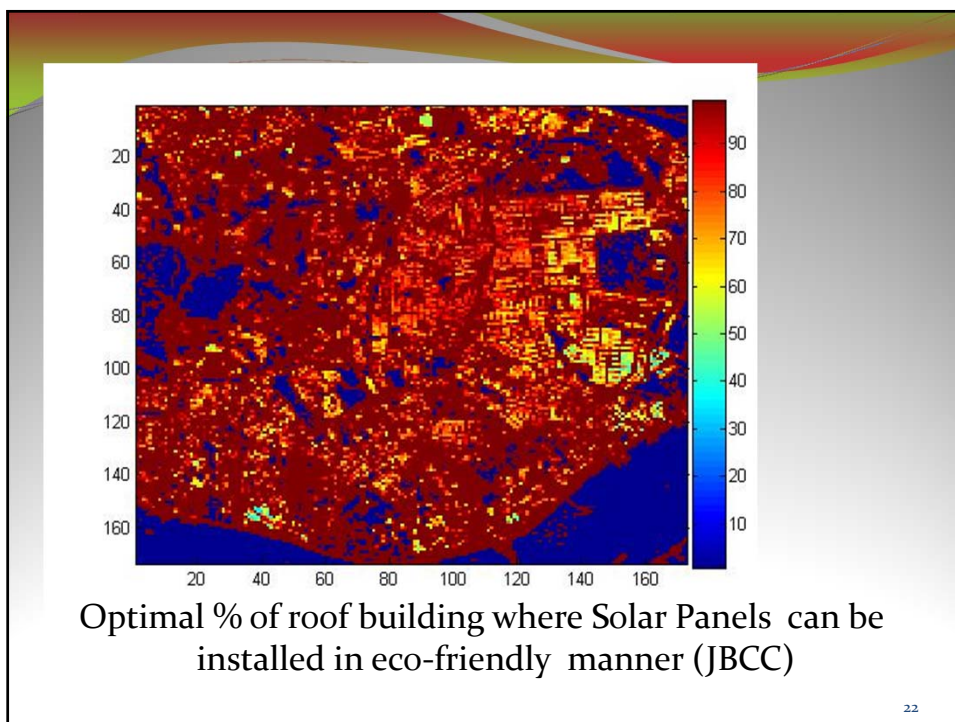
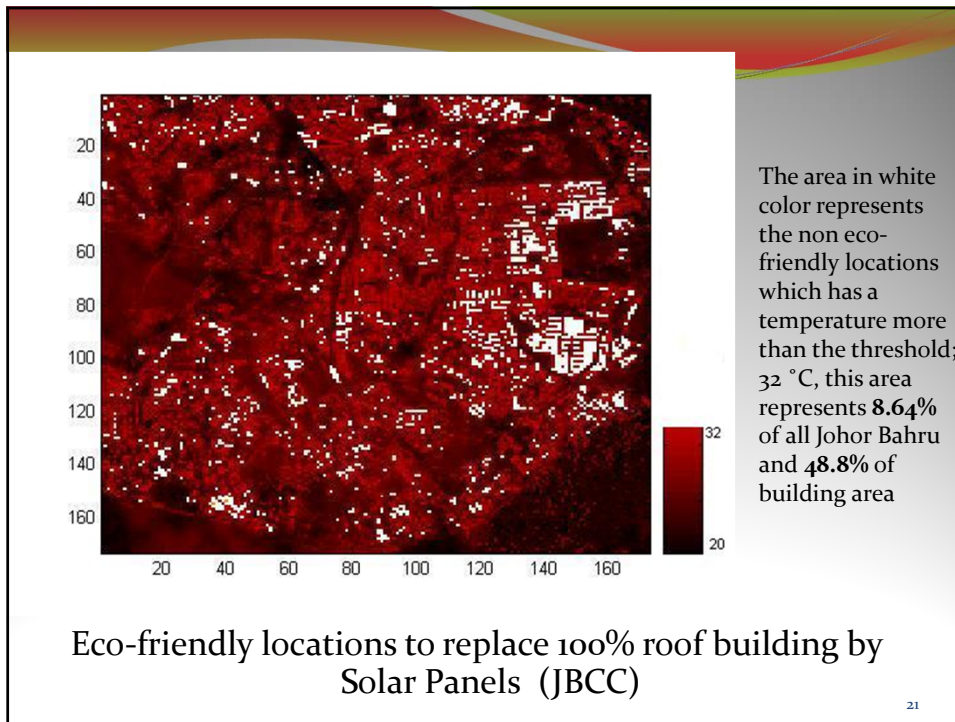




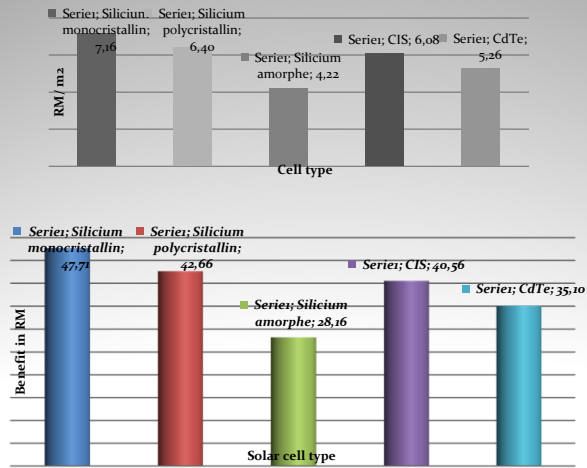




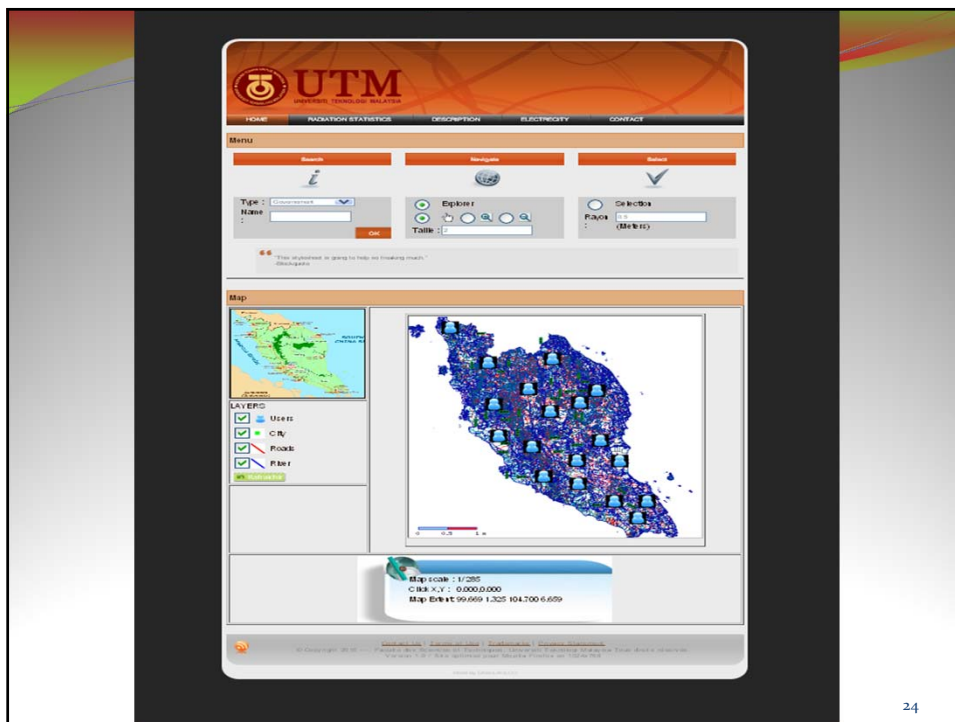




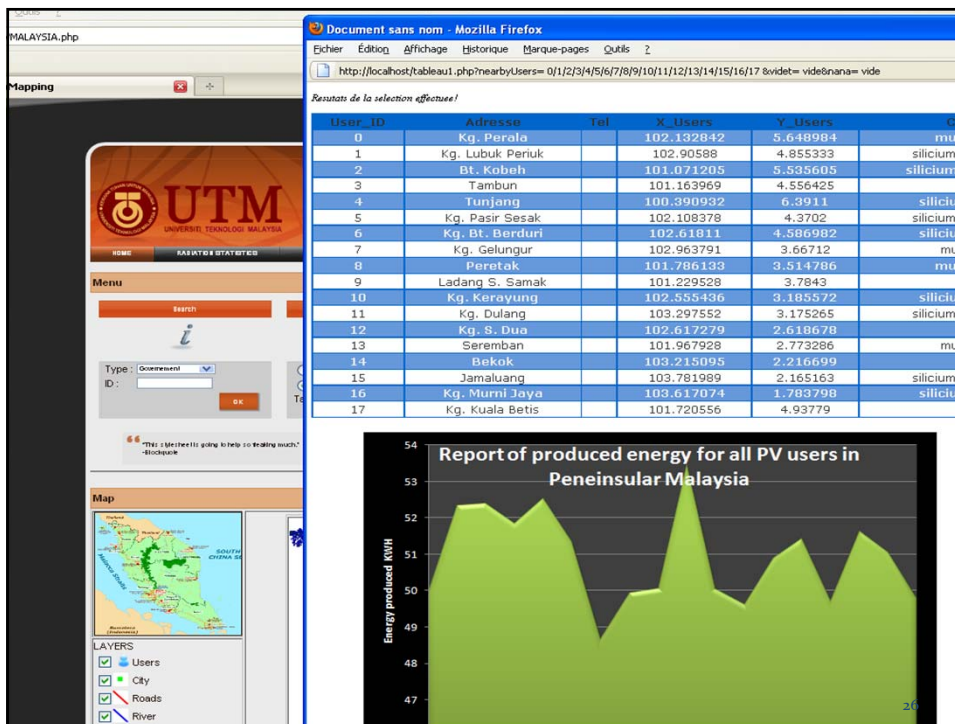
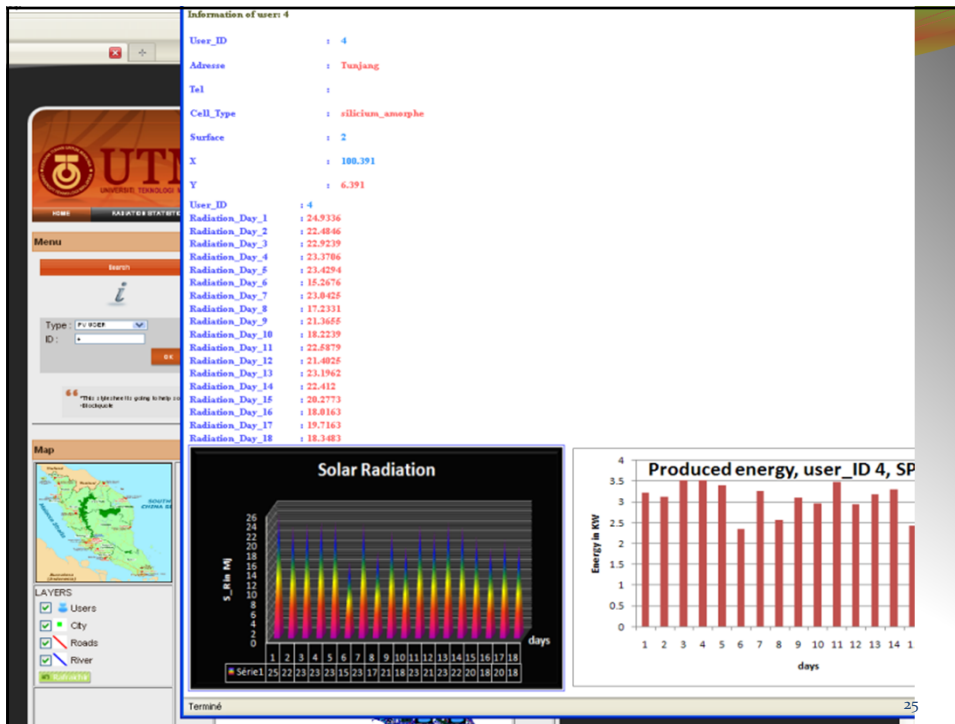
# Results

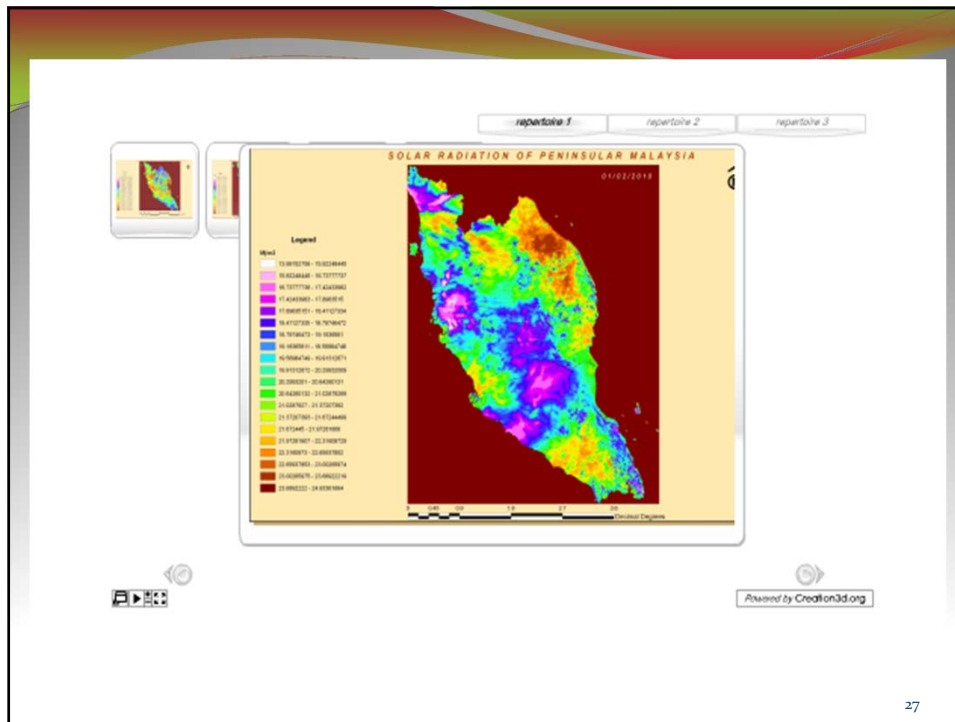


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# Conclusion

**Government And decision makers**

- monitor and assess the existing PV network;
- Supervise the Ecofriendly installation of PV;
- Quantify the Solar Energy Received and the electrical energy produced (time, space)

**Users of PV**

- keep a record of produced energy (time)
- monirot the performance of the PV

**Interested users General Public**

- Access to useful and quantitative information on PV benefits in the nearby ;
- Assess the Eco-friendly possibility of installing PV pannels
- Estimate the Solar Energy and potential electrical production and its equivalent in RM for a given period of time (in his/her location);
- Support to decide on installing or not PV.
- Promote and enhance the awareness on PV advantages

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