



# CO-OPERATIVE EDUCATION

**Name of an organization**

Piampeeti Wungsatana wat ID: 6331501044

**Computer Engineering**

# OUTLINE

## 1. Introduction

- Name and Location of company
- Consulting Name and his/her position at the company
- Mission and main products of company

## 2. Tasks/projects assignment

## 3. Discussion

- Benefits
- Limitations
- Suggestions



EGAT



“แม่เมาะเมืองน่าอยู่”

MAE MOH SMART CITY

ยินดีต้อนรับ

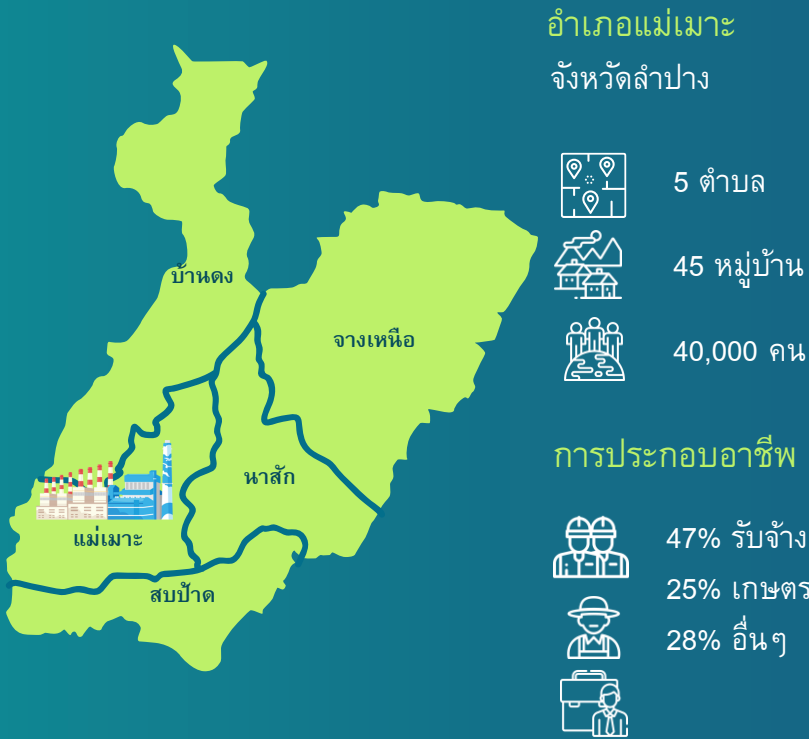
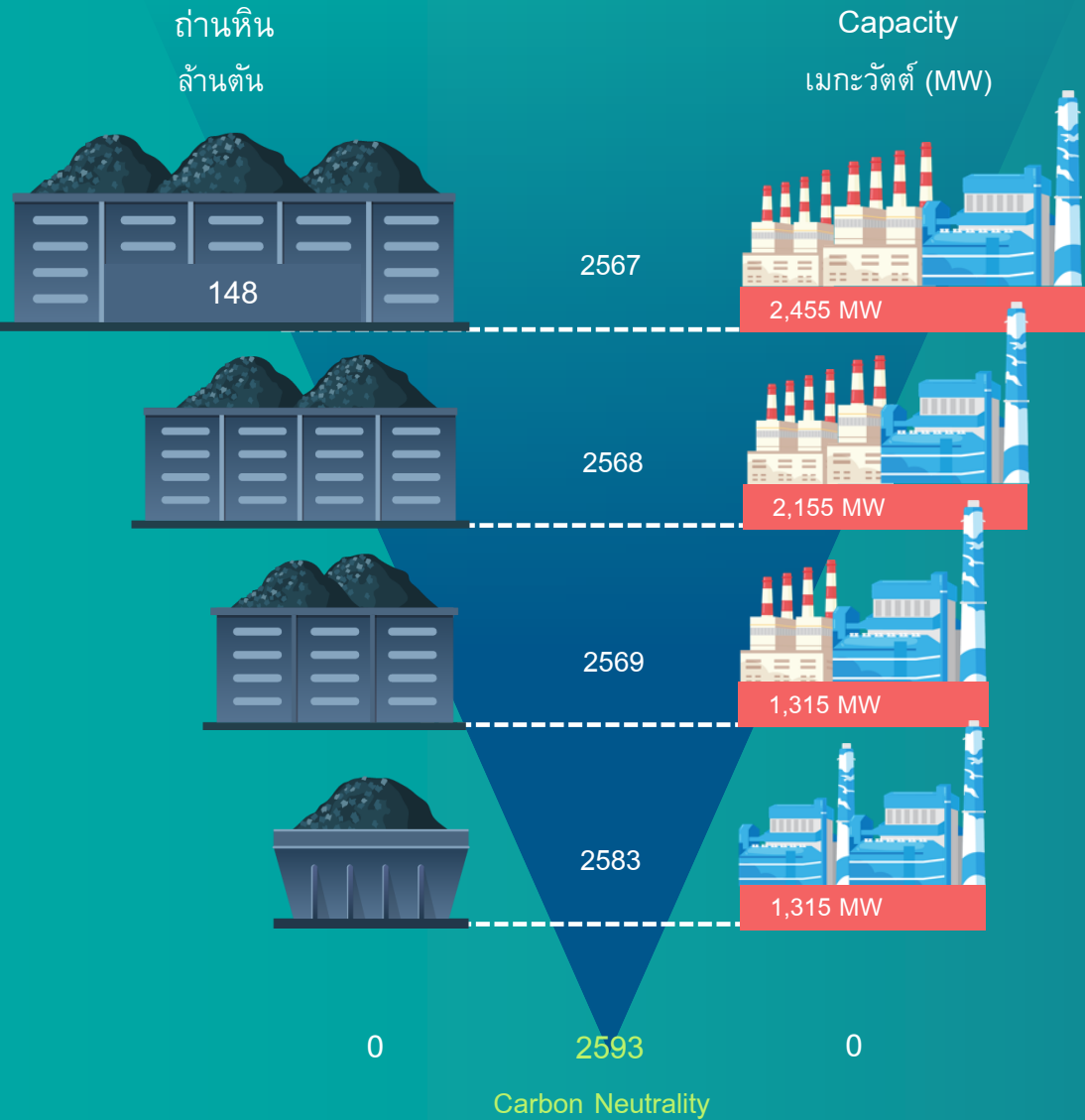


# Organizational structure under “Mae Moh Smart City project”

## หน่วยวางแผนและบริหาร (นวบ-มน.)



# EGAT Operation



‘แม่เมาะ’ มุ่งสู่เมืองเศรษฐกิจคาร์บอนต่ำ

# MAE MOH GREEN AREA

เพิ่มพื้นที่สีเขียวด้วย  
พืชพลังงาน

นิคมชุมชนเกษตร

พัฒนาเป็นแหล่งเกษตรอินทรีย์และ  
การท่องเที่ยว นาร่องหมู่บ้านอพยพ

หมู่บ้านอาหารสัตว์  
สร้างเศรษฐกิจชุมชน

BIOMASS ECOSYSTEM  
พลังงานชีวมวล

Renewable Energy  
การพัฒนาพลังงานสะอาด

CITY DATA PLATFORM

ฐานข้อมูลเพื่อการพัฒนาเมือง  
มุ่งสู่การลดก๊าซเรือนกระจกสุทธิเป็นศูนย์



## Mission and main products of company

- Retrieve Solar Cell usage data from Mae Moh Training Center via an API automatically and compile it into a Dashboard format
- Develop a solar energy data storage and management system using the Node.js framework



# Retrieve data from an API automatically using **PM2**

The screenshot shows a Windows desktop environment. In the background, a Notepad++ window is open at the file path `C:\Production\Solar\run cmd.txt`. It contains the following commands:

```
1 --- Run this command on cmd every 15 minutes---
2 pm2 start app.js --name get_solar_maemoh_training --no-autorestart --instances 1 --cron "*/15 * * * *"
3
4 --- Monitor tasks ---
5 pm2 monit
6
7 --- Restart when change code ---
8 pm2 restart app.js --name get_solar_maemoh_training --no-autorestart --instances 1 --cron "*/15 * * * *"
9
```

In the foreground, the PM2 Dashboard is open. The 'Process List' on the left shows the following processes:

- [ 0 ] Get\_BiomassData Mem:
- [ 1 ] Get\_BiomassSamplingData
- [ 2 ] Get\_CheckSheetData Mem:
- [ 3 ] Get\_checksheets\_bay Mem:
- [ 4 ] get\_ev\_data Mem: 0 MB
- [ 5 ] **get\_solar\_maemoh\_training**

The 'Logs' section for the selected process shows a series of successful API calls:

```
get_solar_maemoh_training > Record inserted api1 successfully
get_solar_maemoh_training > Record inserted api2 successfully
get_solar_maemoh_training > Record inserted api3 successfully
get_solar_maemoh_training > Record inserted api2 successfully
get_solar_maemoh_training > Record inserted api1 successfully
get_solar_maemoh_training > Record inserted api2 successfully
get_solar_maemoh_training > Record inserted api1 successfully
get_solar_maemoh_training > Record inserted api3 successfully
get_solar_maemoh_training > Record inserted api3 successfully
get_solar_maemoh_training > Record inserted api3 successfully
get_solar_maemoh_training > Record inserted api1 successfully
get_solar_maemoh_training > Record inserted api2 successfully
get_solar_maemoh_training > Record inserted api3 successfully
get_solar_maemoh_training > Record inserted api1 successfully
get_solar_maemoh_training > Record inserted api2 successfully
get_solar_maemoh_training > Record inserted api3 successfully
get_solar_maemoh_training > Record inserted api1 successfully
get_solar_maemoh_training > Record inserted api2 successfully
get_solar_maemoh_training > Record inserted api3 successfully
```

The 'Custom Metrics' section shows:

- Used Heap Size: 10.80 MiB
- Heap Usage: 89.78 %
- Heap Size: 12.04 MiB
- Event Loop Latency p95: 8.39 ms

The 'Metadata' section shows:

- App Name: get\_solar\_maemoh\_training
- Namespace: default
- Version: undefined
- Restarts: 1246
- Uptime: 14m

At the bottom of the dashboard, it says: 'left/right: switch boards | up/down/mouse: scroll | Ctrl-C: exit' and 'To go further check out <https://pm2.io/>'.



# Internal Website: SolarEnergy

SolarEnergy



Profile Piampeeti Wungsatanaawat ▾

Dashboard

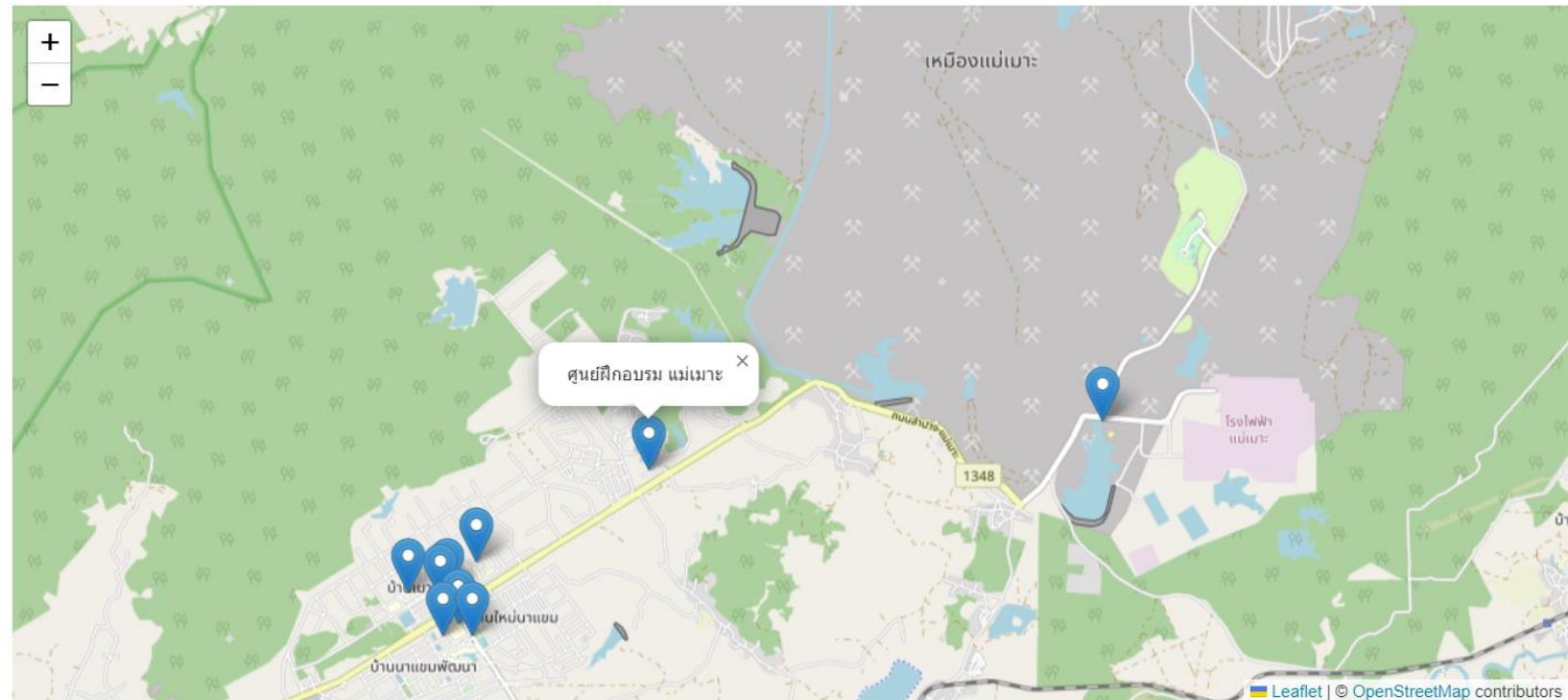
PAGES

Profile

Data

- User
- Solar Panels
- Transactions
- Reports

Map



## Benefits

- Daily internship allowance is 200 baht
- Learning new technologies and languages outside the classroom at university
- Learning to adapt to the social environment at the workplace
- Participating in organizational activities to meet new people and establish connections for the future

## Limitations

- Collecting pure data can be challenging because each targeted organization uses different platforms



The background of the slide is a photograph of a tropical building with a corrugated metal roof and lush greenery, including palm trees. A group of people is gathered in front of the building. The image is overlaid with a semi-transparent teal filter.

## Suggestions

- Studying commuting to the workplace and adapting to the social environment at work to the maximum extent possible





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THANK YOU