# Pearl Smart Resort

The 11th Virtual Design World Cup **PROJECT LOCATION** 



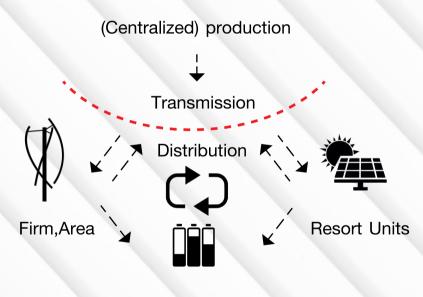
#### **PROJECT OVERVEIW**

#### PROBLEM PHASE

Phuket is facing problems such as not being able to secure sufficient amount of resources and energy to keep up with the rapid growth that the city is now experiencing, and not being able to take care of the increasing amount of traffic and garbage that come along with such rapid growth.

## **PRODUCTION PHASE**

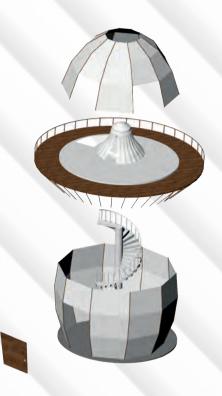
In order to achieve a smart Island, we upgrade the infrastructure systems of Phuket to an update. By changing centralized production to decentralized generation, the island could be able to produce its own necessary energy. To solve the waste problems, instead of burning and burying the trash, we will use Mobile Aerated Floor (MAF) composting system which promotes the growth of bacteria that breaks down the trash and turns into nutrient-rich, high-quality compost that can be sold to farmers and gardeners.



# TYPICAL UNITS

The followings are some of the units of resort.

**RESORT UNIT** 





Smart Monitoring Systems Embedded

# HEALING GARDEN

#### FISH POND AND KITCHEN

Fishpond and planting area are activities that can grow healthy life.

# TRASH BANK

The goal of garbage bank is to manage the rubbish individually. The rubbish can change into digital currencies.

#### **BICYCLE PARK**

The various kinds of bicycle can give new motivation for the society in cycling.

L.I.V.E GYM Connecting the gym facilities by using kinetic converter into electric. It can produce energy for fulfilling daily need such as light and electrical storing for phone cell and laptop.

## FINAL PHASE

It is mandatory to provide happiness the people in the smart resort. Meditation Centers and public spaces like local parks courtyards where people can participate various activities are necessary to create a more serene living environment and also provide the users healthy and prolong

MANGROVES NURSERY



#### **OBLIQUE MODEL**

This model shows the technology foundations for site. The main target from this facility is to increase the environment quality of the site, store sustainable energy and reduce the amount of pollution.

SETTLEMENTS

The units are being supplied of clean water from Biosolids facility.

SEA WATER CANAL Pipeline from sea

CLEAN WATER PIPE Pipelines from Biosolids facility

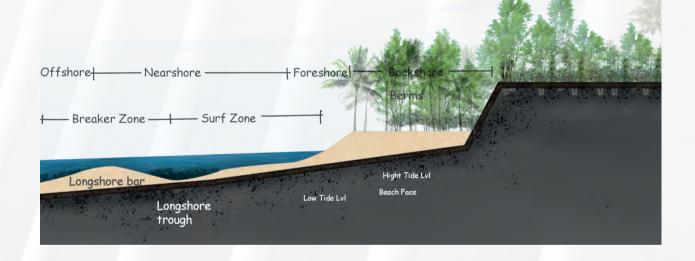
ELECTRIC LINES CANAL Pipelines to Energy Storage Center

WASTEWATER PIPE Pipelines to Biosolids facility

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#### **Coastal Preservation**

By using biosolids and plant the trees along coastal for corrosion preservation.



MANGROVES BARRIER





Healing Resort



Lodging Area



Public Area



Inside the Biosolids facility

**BIOSOILDS PORT**