YES! [Yangon Eco Street]

THE 7th Virtual Design World Cup

ARCHI MAP

Introduction

- Yangon, Myanmar's largest commercial city, is the city where 70% of lands are coverd by forests.
We planned "Yangon Eco Street" to make Yangon a sustainable city in consideration of nature, and tried to build the sustainable city which cares about political, economic and social parts. Therefore, this project "Yangon Eco Street" planned the future of Yangon that applied Eco system to the whole city.

Design Concept

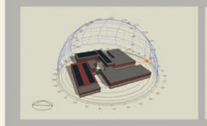
- Yangon is a city where Buddhism and nature co-exist. However, many problems such as traffic congestion and electricity shortages occur recently due to the rapid development of the city. To solve these problems, "Yangon Eco Street" would rather cooperate with the nature than control.

[Yangon Eco Street]

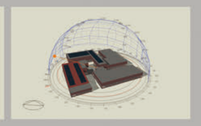
Eco Analysis_Using the Design Builder

- We can see the sun's elevation change in the morning and the afternoon in January and July, and you can apply the direction of the building by looking for the building's direction that can receive the best sunshine through "DesignBuilder". "DesignBuilder" is used to analyze and simulate the heating and cooling system and lighting to save energy. In addition, maximizing the use of natural light and green energy will help you achieve your goal to decrease carbon emissions.

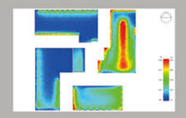
January



AM 9

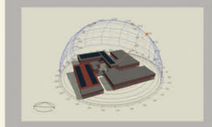


PM 3



By changing the direction of the building, more sunshine can be secured.

July



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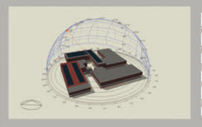
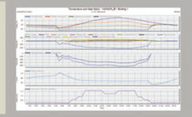
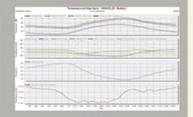


PM 3

Building Cooling Design

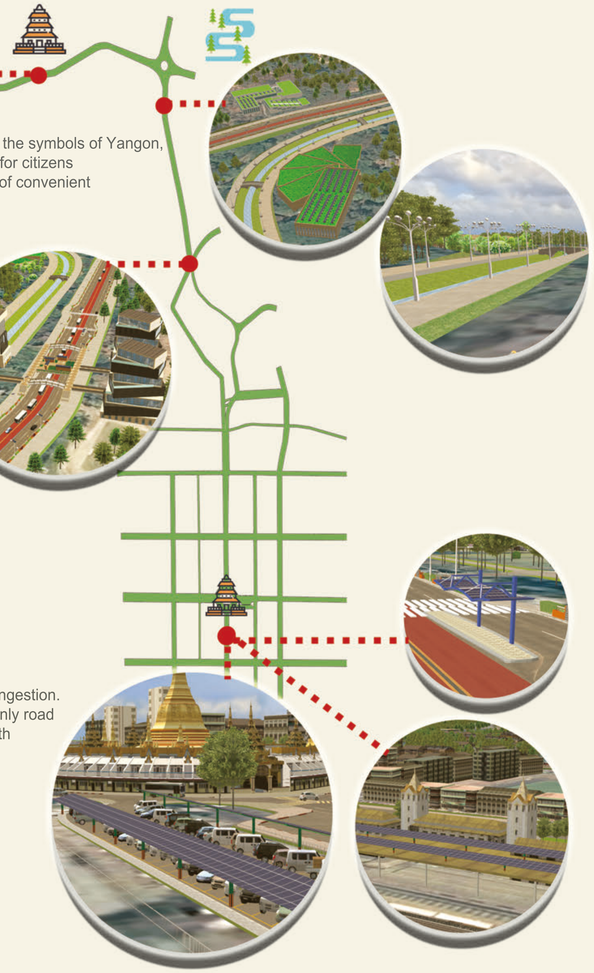


January



July

Eco Zoning



1. Open Space

- In front of Shadogon Pagoda, the symbols of Yangon, we designed the Eco Bus stop for citizens and tourists to take advantage of convenient public transportation.

2. Community Facilities

- The road to Shdagon pagoda is the most forested. Here, a history museum, a power station, a waterway and a lagoon are installed to become a natural shelter for public.

3. Commercial

- In order to solve the population densities, a residential apartment complex is designed and a bridge between the buildings is installed to secure the connection to the park and raise the convenience.

4. Green Traffic

- This road has heavy traffic congestion. We convert the road into Bus-only road and install more parking lots with solar panels.

Eco System & Urban Planning

1. Eco Street

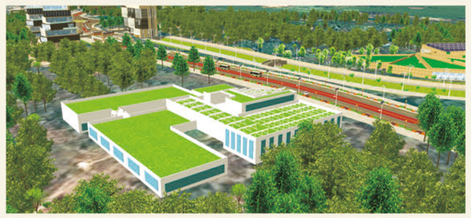
- We planned Eco Street focusing on pedestrians and public transportation .
Natural landscaping can be used to separate pedestrian street and roads, to prevent traffic accidents, unauthorized crossing, and improve citizens' awareness of traffic regulations.
In the center of the road, a bus-only road is installed to relieve traffic congestion. The solar panels at the bus stop and street lamps are installed to secure green energy.

2. Waterway & Lagoon

- A lake and a waterway are usually used as a park and a promenade, and in the case of rainy days, it is used as a drainage and lagoon. And for Yangon, where floods occur frequently, we install a drainage line on the road and create a rainwater storage tank around it to prevent floods.

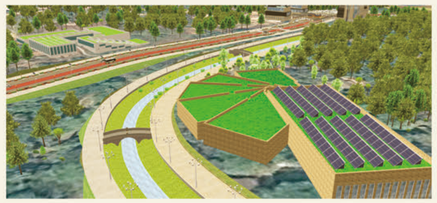
3. History Museum

- We designed a history museum to provide a history exhibition hall for citizens and commemorate the sad history of Myanmar. We took the Buddhist letter '卍' as the design concept of the building. The solar panels are installed on the exterior of the building to provide green and stable supply of power.



4. Power Plant Building

- In order to cope with the power shortages due to flood damage and rapid development, we installed a hydro power and solar power plant utilizing natural power, and by installing a solar panel on the exterior of the power plant building, we can get more green energy.



5. Public Facitities

- Solar panels are installed on public facilities on the roads to provide electricity that is environmentally friendly. We installed solar panels on overpasses, street lamps, bus stops, parking lots, and railroads.
We also used a variety of green energy for public facilities, such as history museum.
We installed the parking lot to solve the on-street parking caused by the shortage of parking lot. At the same time, a solar panel was installed on the parking lot to secure green energy.