

THE 10TH VIRTUAL DESIGN WORLD CUP



Theme 2020: Future Mobility Lifestyle in Kalimantan, Indonesia's New Capital known as the "Forest City"

KALIMANTAN - MOBILITY FOREST IN FUTURE

INTRODUCTION

LEGO Strams team suggests design with the topic "Kalimantan - Mobility Forest in Future". In this project, our designs focus on creating a balance between modern technology and nature. Along with that, ensure the flow of wind in the city and natural water sources.



DESIGN CONCEPT

We are inspired by the Stratification of vegetation in Tropical rain forests. The design will consist of three layers:

- Understory Layer: The natural habitat of organisms and groundwater resources will be protected.
- Canopy Layer: The main living space of the people. Buildings with pillars and green spaces on the roof will ensure the flow of wind and keep the city cool.
- Emergent Layer: The place is installed with green energy sources to supply the city.



UNDERSTORY LAYER



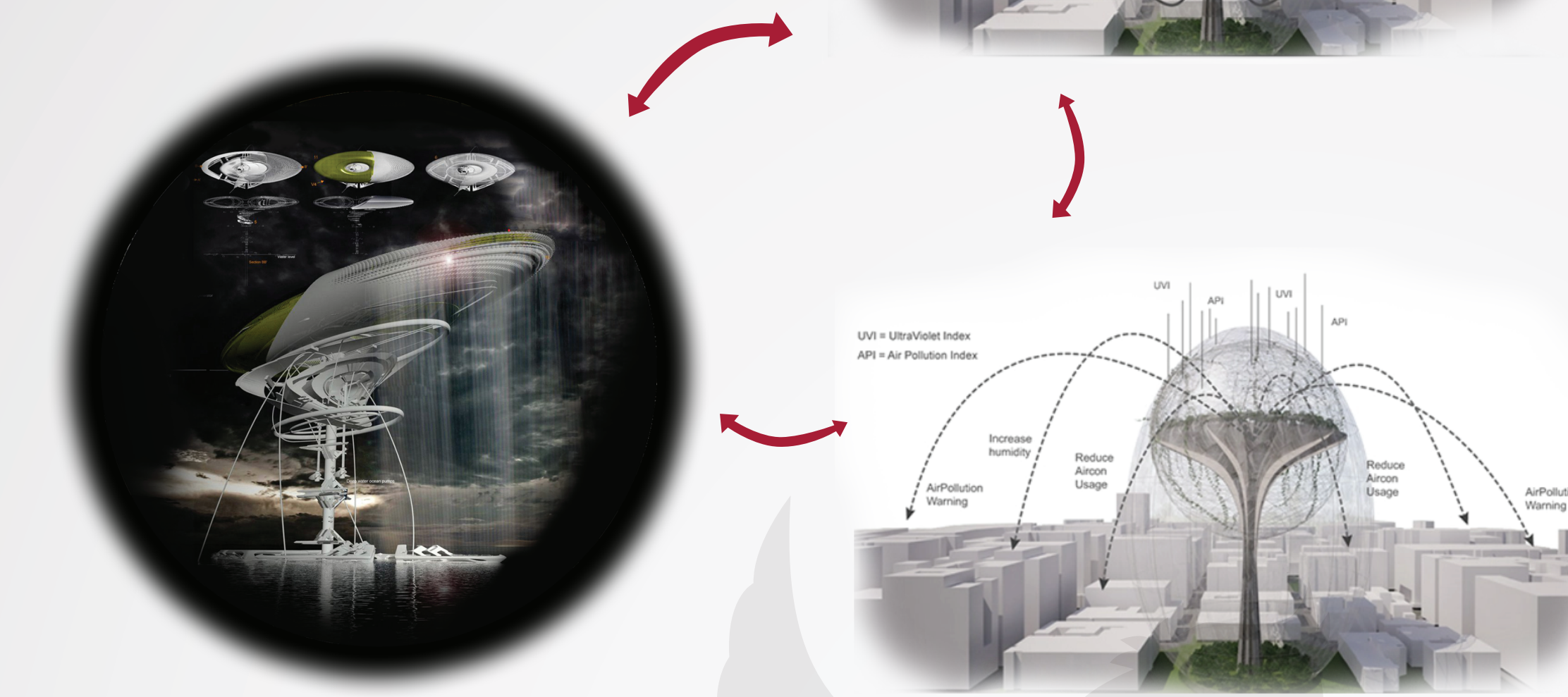
CANOPY LAYER



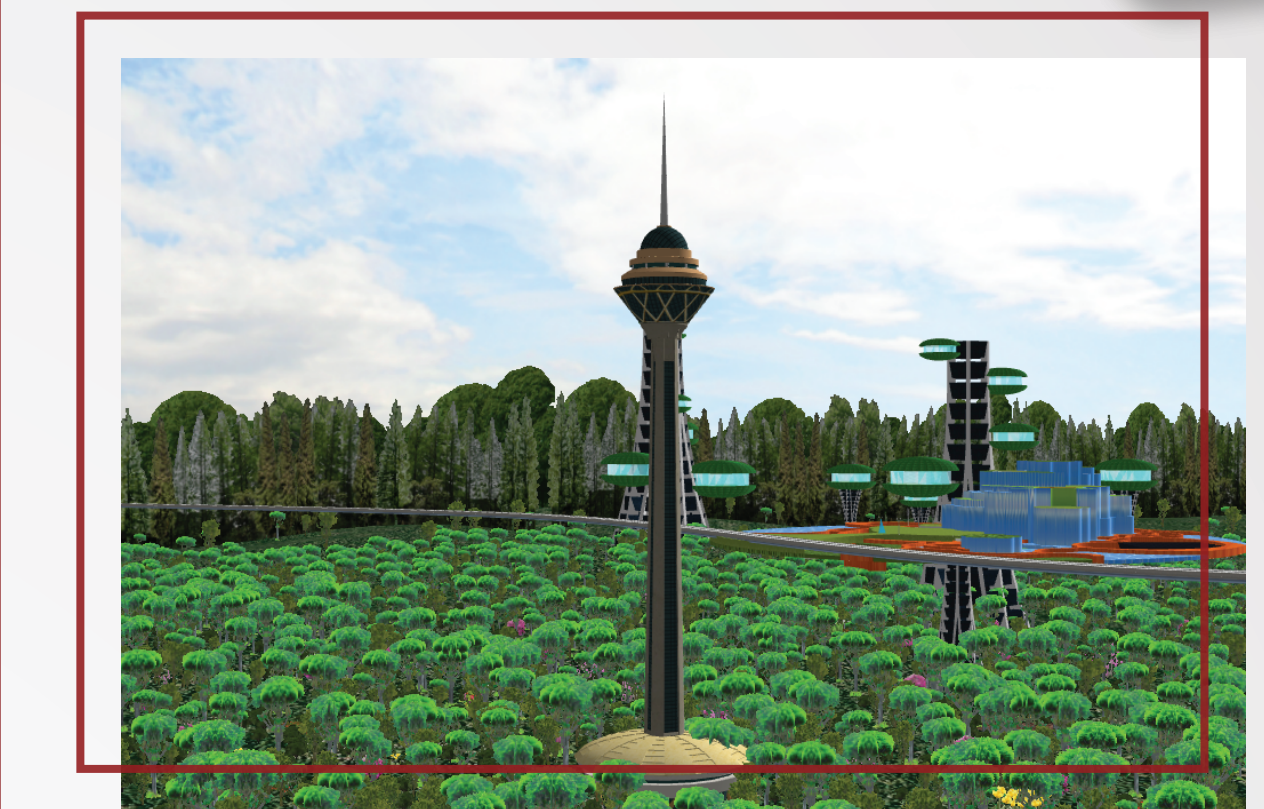
EMERGENT LAYER

CITY-PURIFYING TOWER

City-Purifying Tower was designed as a research center that evaluates urban meteorology and corrects the environment with technological engineering. Look at it like a giant humidifier/air-purifier for your city. It also monitors things like radiation, insolation and thermal coverage, notifying the public for awareness and city departments to help maintain healthier environments.

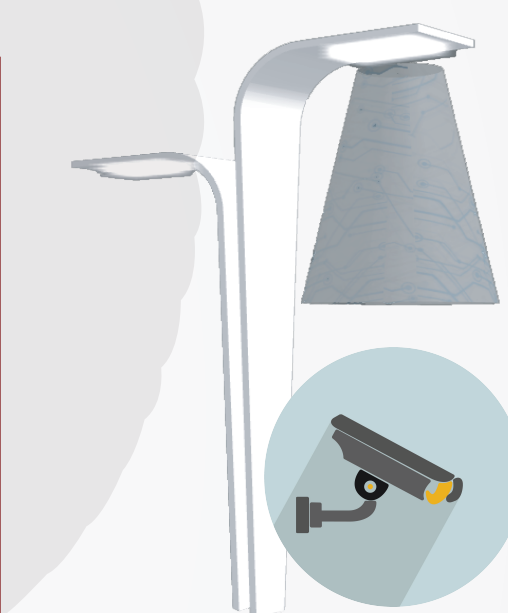


BIG DATA CENTRAL



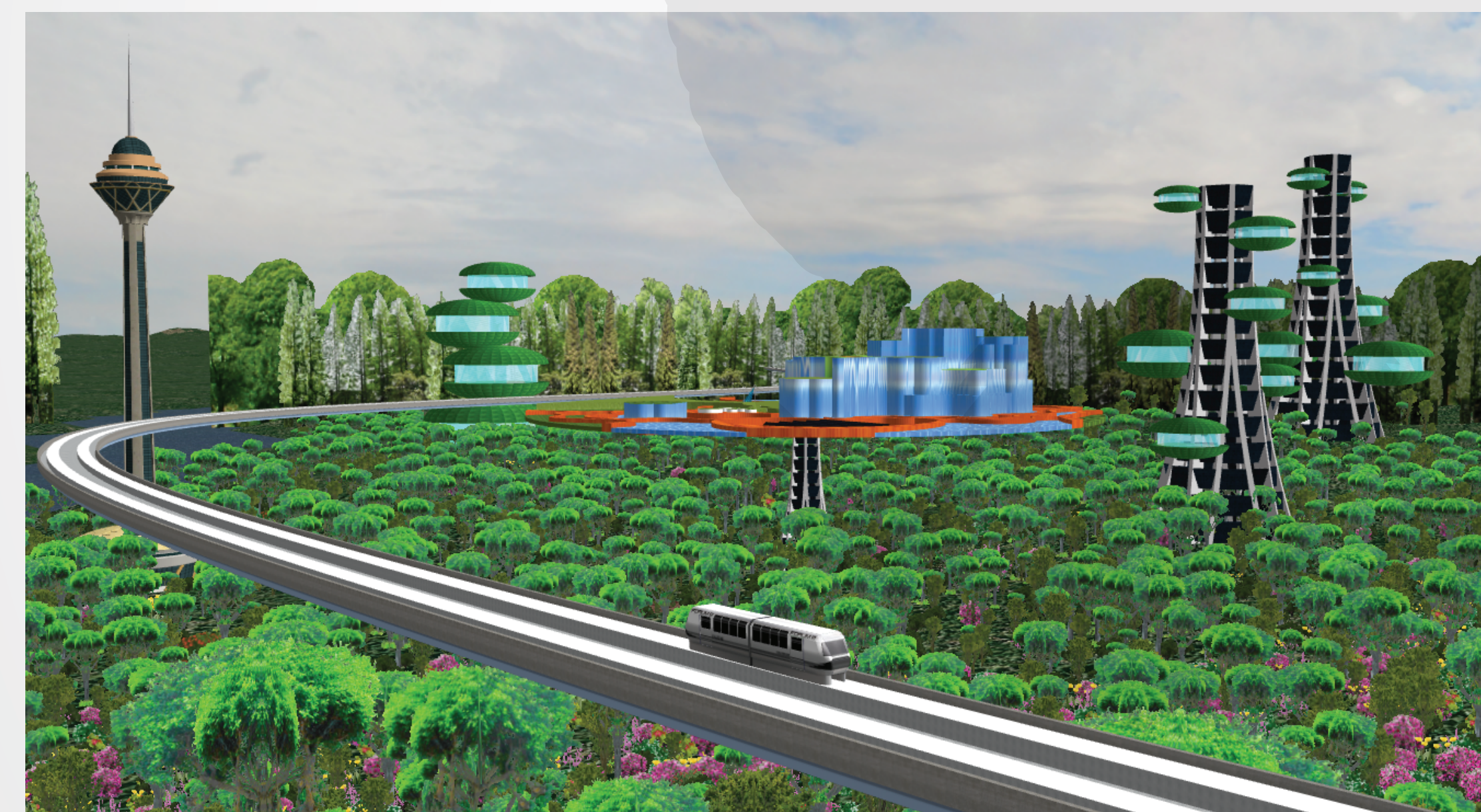
Big DATA Central is a place to monitor and collect information from CCTV systems and sensors in the city for operation, security, control, notification,...

CCTV SYSTEM



High-definition CCTV systems can pick out faces up to 10 meters away. Faces are scanned and the points are 'mapped' out into a series of algorithms. Thereby, the cloud system compares to verify identity to search for and ensure security in the city.

PUBLIC TRANSPORT



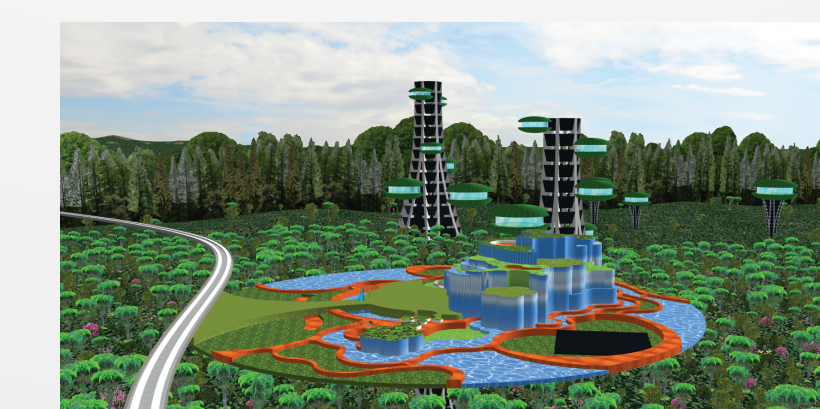
We create a green traffic network that is spider web shape by basing on the old road. It is only for public vehicles such as electric buses, trams...using "green" material sources thereby moving quickly and safely and protecting the environment.

Using different traffic levels to avoid conflict of flows. This measure aims to limit congestion and accident.

The development of science and technology and IoT intrusion are reason to create smart vehicles. Therefore, passengers'd check information journey through smartphone.

WATER COLLECT

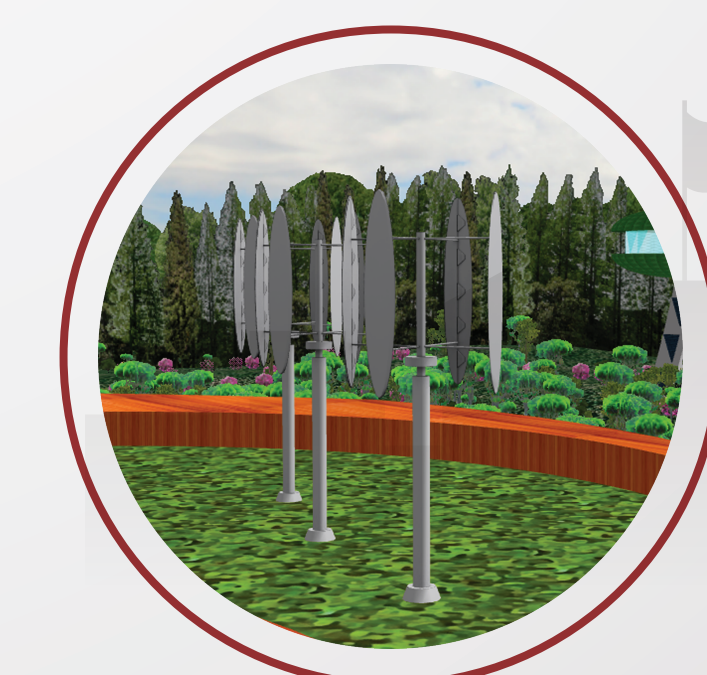
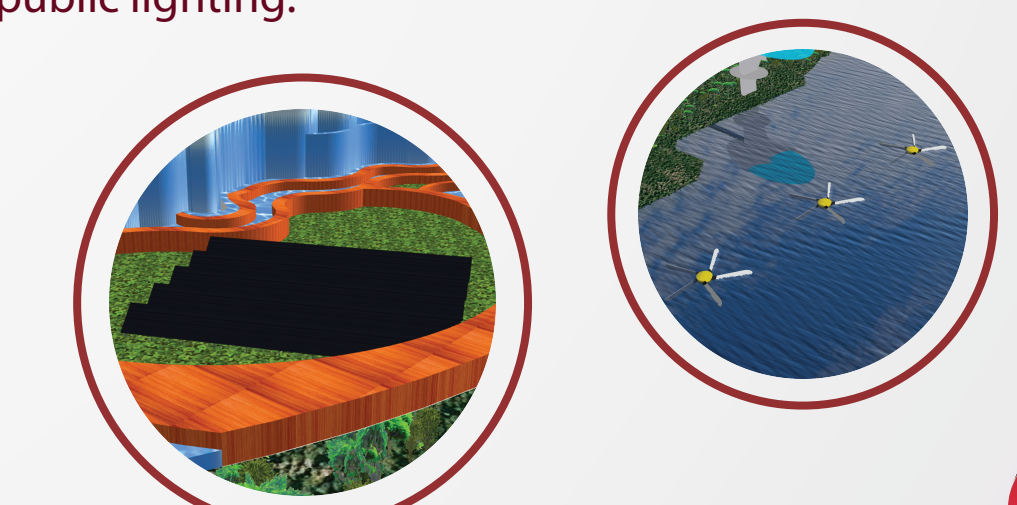
In parallel with sharing solar energy, we think of sharing water resources. The water supply and drainage system consists of a drainage pipe system that connects and leads water to the reservoir. Here, the water is processed and supplied air conditioning and temperature system.



GREEN ENERGY

The energy issue is always our concern and attention. In addition to using green transport, renewable technologies and modern energy saving. We also use natural and biological energy-generating measures.

We export used solar power to the public transport. Use energy generated from wind, waves and biology for public lighting.



TOOL COOPERATION

VDWC2020-0018 | LEGO Strams

UC-min/Road

Google Earth

LUMION

DesignBuilder SOFTWARE

3 AUTODESK 3DS MAX

Allplan

SketchUp Pro 2018