

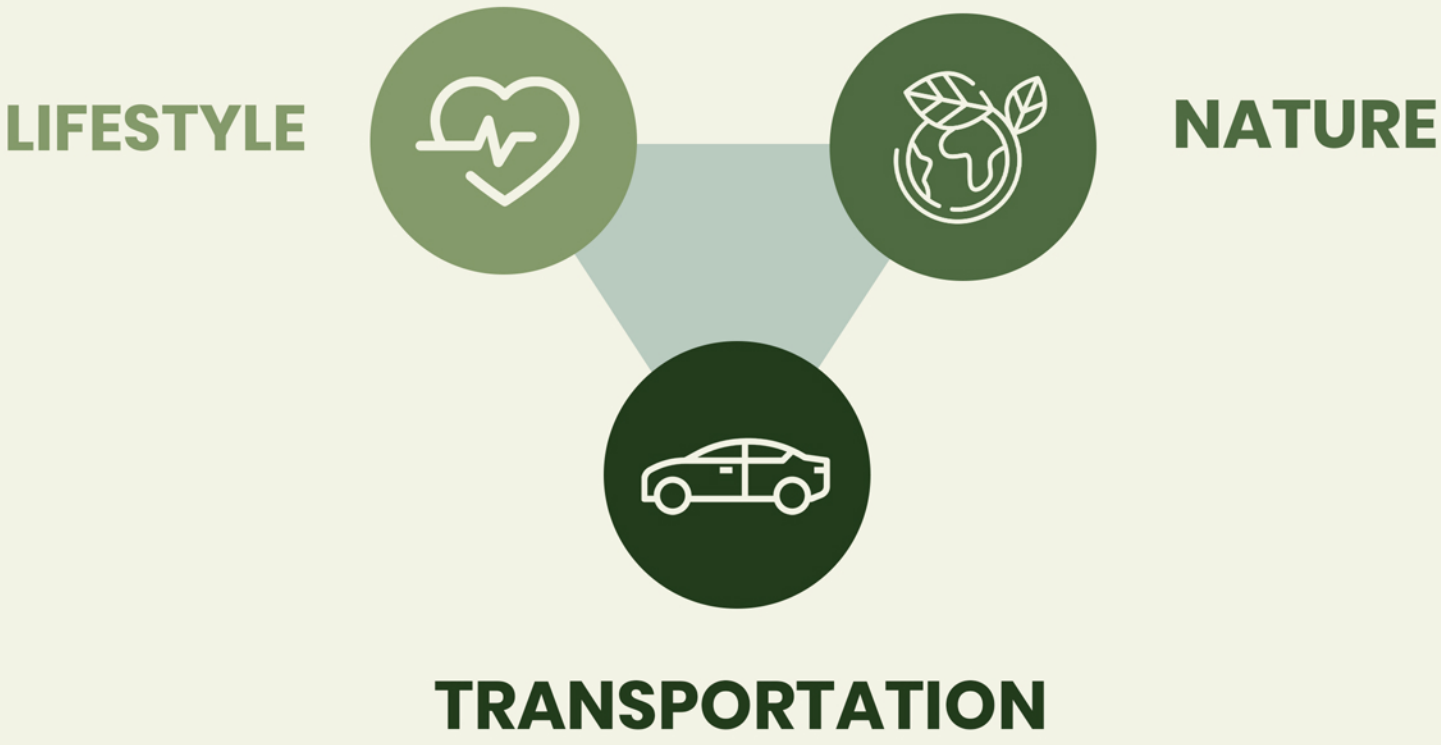
AKSATA

"As the above is underground,
We're ones in between"

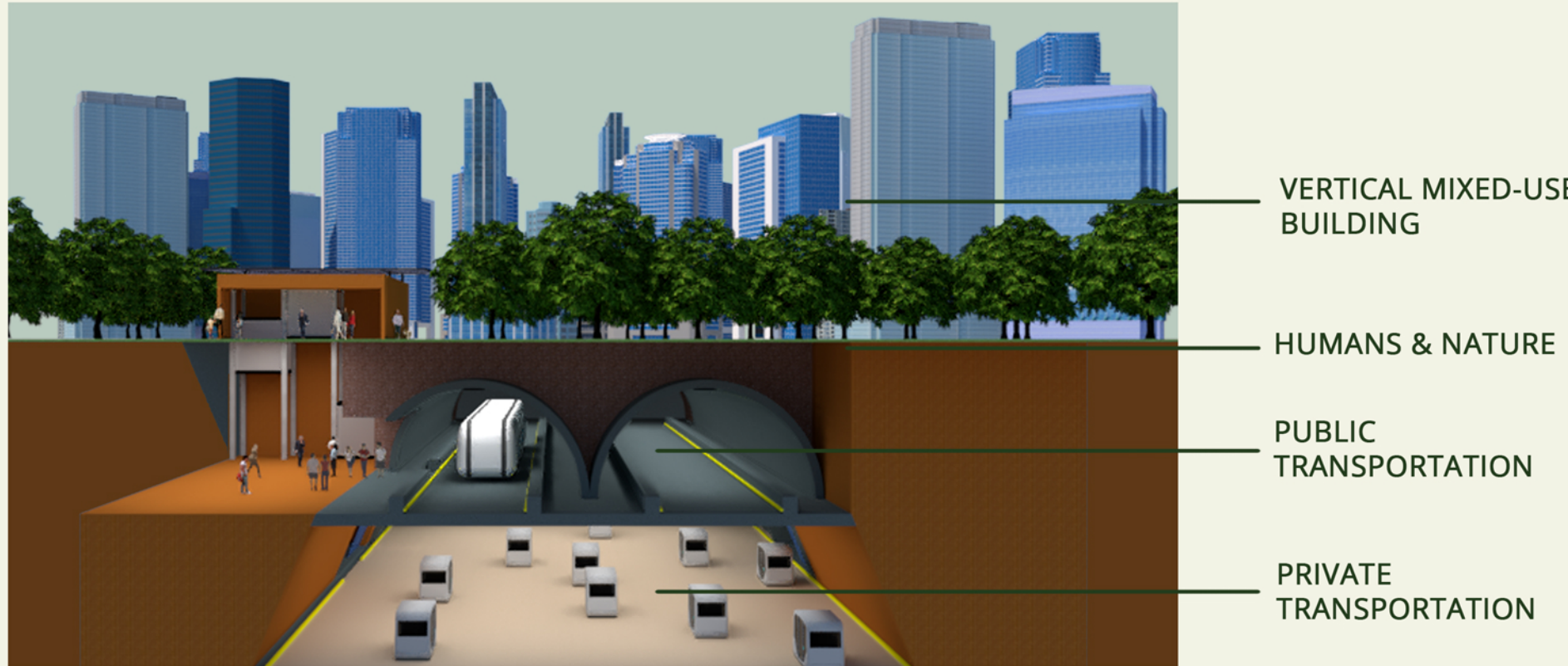
Competition entry for Virtual Design World Cup 2020

Overview

The future capital city will have a **Compact Forest City** concept with Smart, Integrated and Shared Mobility, emphasizing mixed-used vertical buildings and using hubs for transit points that integrate various functions. "Forest City", means to minimize land used for buildings, increasing green open areas, and using renewable energy like solar and biofuel. Using a smart and bioclimatic concept, we integrate IoT and AI to monitor and control all the systems in the city including vehicle and energy usage.



Integrating Nature in a Futuristic City



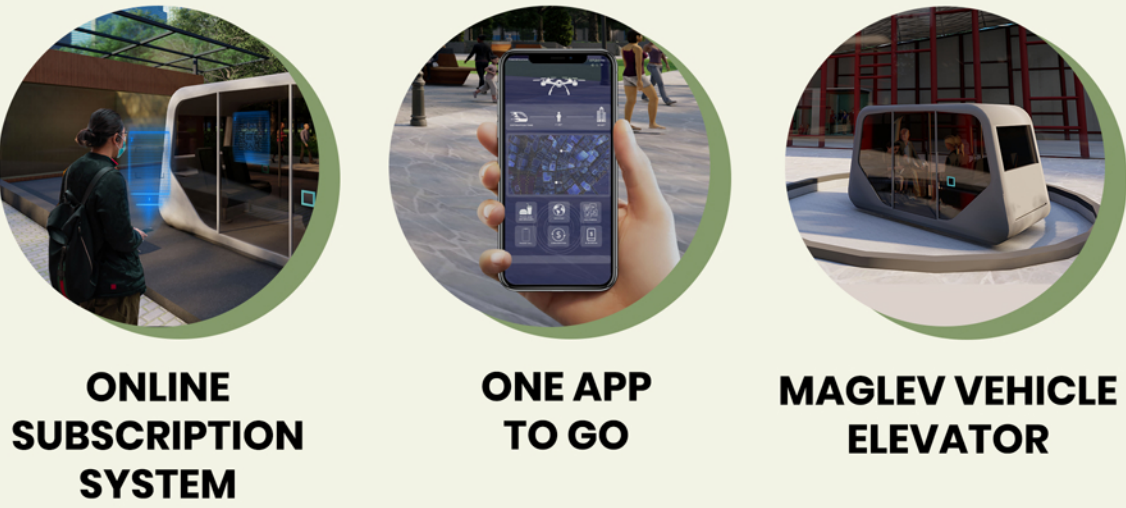
The main road and public transportation lane will be covered with a green deck, providing ground floor for pedestrians and cyclists. It's also a way to protect green areas and to enhancing a new experiences. Vehicles and the city will use solar and biofuel which is sustainable and minimize pollution. Solar is the main power plant because Kalimantan is right on the equator and the sun is up everyday.

New Mobility Lifestyle



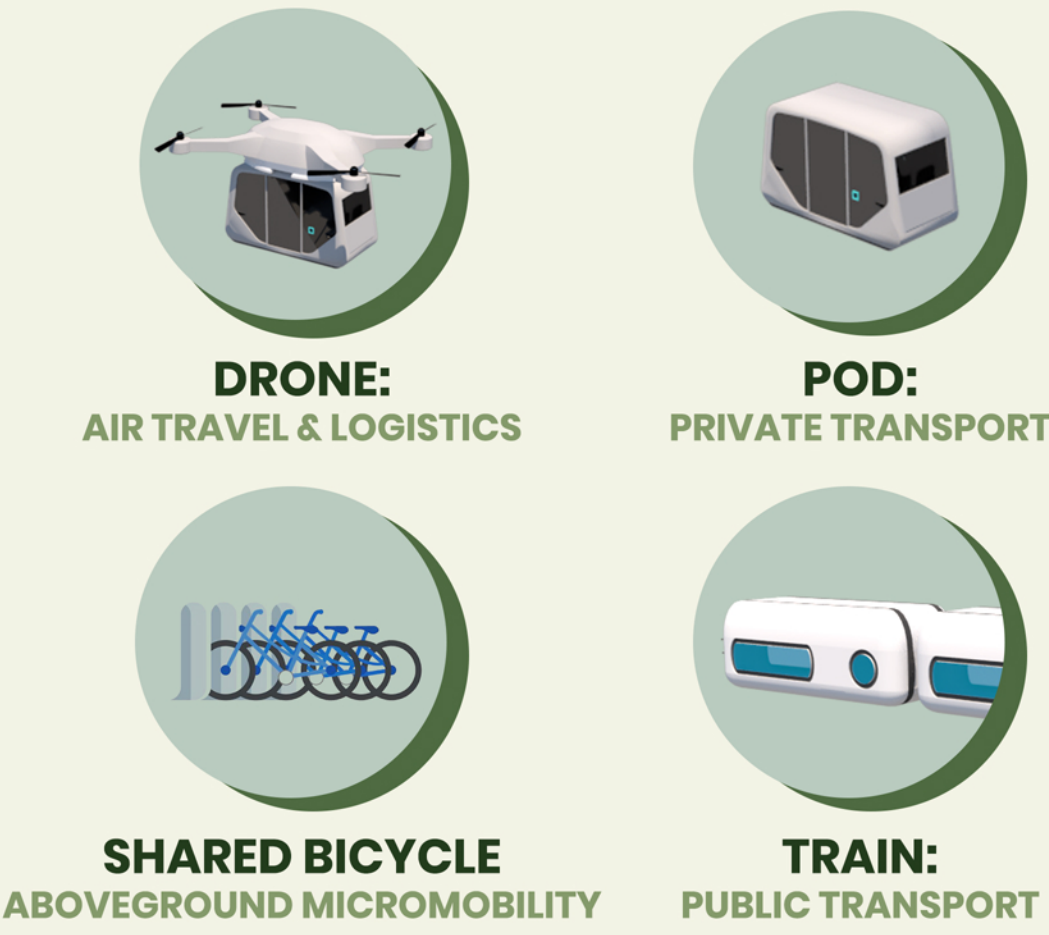
The city design highly promotes walkability. With a compact design, underground rapid transit lines will connect users to various spaces. Once completed, users will not spend more than 5-10 minutes walking to reach their destination or the next transit hub. All buildings will integrate a significant amount of greenery both inside and outside with larger sidewalks to promote healthy lifestyle. Then, trash from the city will be divided into 3 separate categories and will be recycled for materials, biofuel. Smart Technologies support the city management and other services with top notch security.

Future Mobility



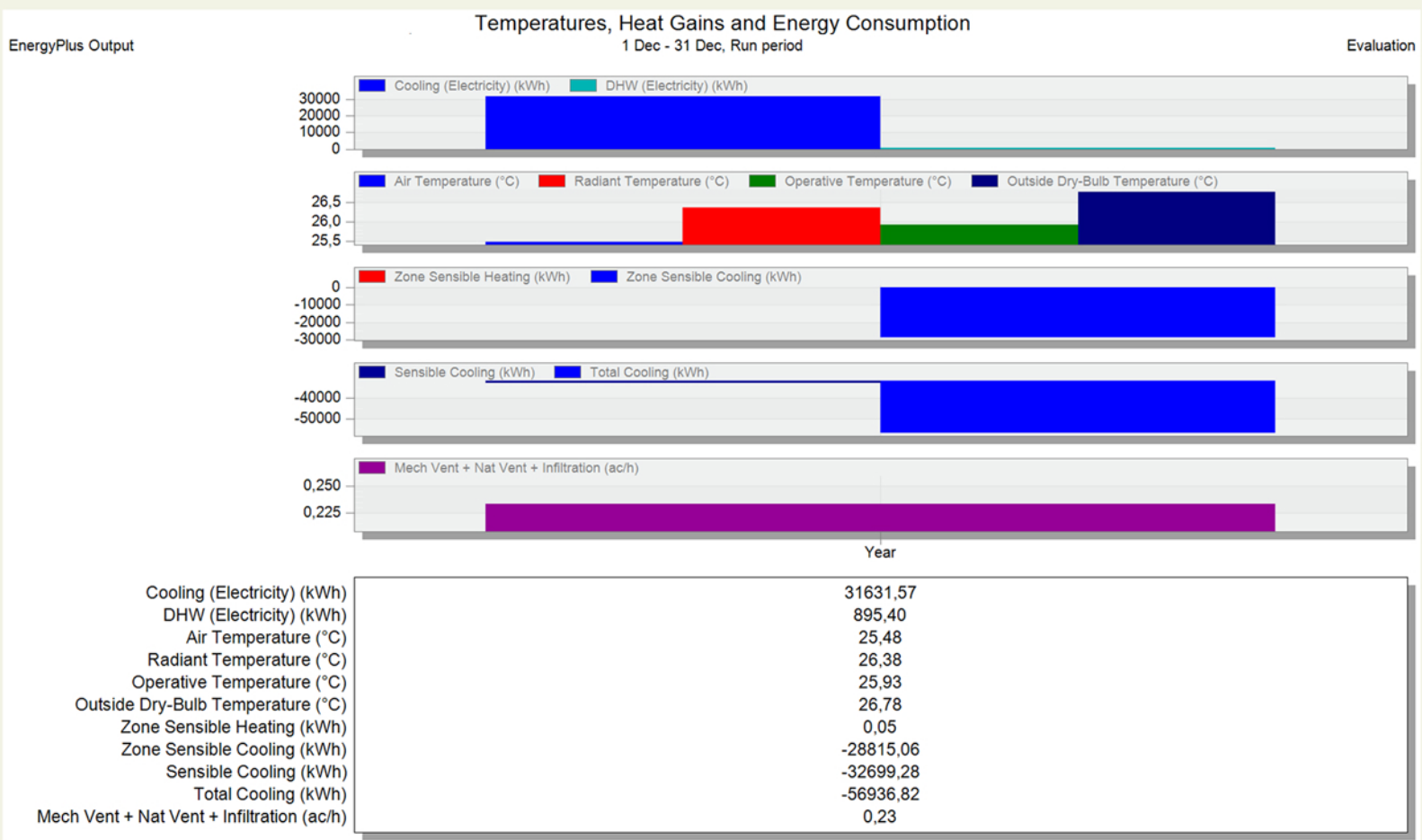
One new innovation that can be a solution for traffic jams is to limit the number of vehicles in the city using a subscription system. It applies to visitors and residents as a substitute for private vehicles. They can leave their vehicles at a selected area so all mobility can be controlled. Public Transportation uses a shared shuttle system, integrating bicycles, taxis, or pods in one system. Air transport uses multifunction drones that can attach to various types of land transportation for emergency and other needs. Logistics can use pods on land and drones on the air. The pods deliver a few items at a time and use a QR code system, while drones deliver a single item directly to the consumer.

TRANSPORTATION MODES



DesignBuilder: Central Hub Energy Simulation

The City Central Transportation Hub is the most important feature in the city, like a heart connecting citizens to different parts of the city. Using smart solar and energy efficient technologies, the central hub manage to minimize its carbon footprint and energy usage.



Software Used

