**Introduction**

Keelung is a major port city, where is the second largest container harbor in Taiwan, and ranks 25th in the world in container-handling capacity.

According to the main purpose of the redevelopment project in Keelung port - station area that change the image of Keelung city from industry, cargo transport to tourism and service development, by the way, this project will become an attractive tourist destination of Taiwan. INED - UTC team suggests the design theme “Green Flow” which bases on criteria for sustainable development and green design. In this project, we divide the city into five areas connected together as a green flow.

**Design concept**

In order to toward the sustainable development and changing Keelung’s image from a pure commercial port area to a green city where is humbly and environmentally friendly. This aim paves the way for the design concept “Green flow” of INED - UTC team. “Green flow” is a concept related to the redevelopment of cities in a circulatory and sustainable renewable.

Basing on the design concept “Green flow”, we offer some designed and planned solution in order to the main goal:

1. Eliminating motorize and increasing the use of means and some types of public transport. This solution creates a continuous connectivity, uninterrupted and environmentally friendly transport between internal and external.
2. Dispersing the traffic volume to increase capacity, avoid traffic congestion and enhance walking
3. Taking advantage of natural energy, greening the city

**Traffic internal include (inflow)**

- Electric cars start from the port, disembar passengers, transport to the Keelung station and connected to walk street
- Moreover, to encourage and develop environmentally friendly transport between internal and external.

**Traffic external (outflow):**

- To connect the green areas and other outside area, the bus system is placed before the station which is the center of circulation. From there, passengers can easily move to other place where they want to go.

**GREEN 1: GREEN STATION**

For the aim of creating both the prominent icon in city center and transhipment terminal connecting the region with each other, we design a versatile station as a boat which is a symbol of port cities with three main points:

1. The station is built to become the complex commercial service center in addition to serve the main function for passenger.
2. Arrange transhipment terminal of buses and electric car routes infront of station, creating a continuous connection, smooth and seamless between rural and urban area.
3. Station platform is put on the underground contributed reducing noise and saving space above. Moreover, the installation of transparent glass door reflects natural light, lightings for whole building and brings a touch natural friendly.

**GREEN 2: GREEN PEDESTRIAN BRIDGE**

Green pedestrian bridge connects two coast of the bay with the aim of reducing the amount of passengers as well as shortening the distance from the port to station by roads.

Moreover, the bridge is designed with a suitable clearance in order to move the large boats used fossil fuel out of the city area, only allow motor boats and small boats by issues of landscape and environment, ensuring the deing concept.

**GREEN 3: GREEN SQUARE**

This square is designed to develop the tourism of Keelung city with environmentally friendly image.

**GREEN 4: GREEN WALK STREET**

The modern square becomes a public green space for the cultural activity of city community. The bus and eco - transport system which operates harmoniously, smoothly and un - pollution connect this region with other area in Keelung city.

**GREEN FLOW: GREEN TRANSPORT SYSTEM**

The transport system in the city is planned and divided into 2 categories:

- Traffic internal include (inflow)
  - Electric cars start from the port, disembar passengers, transport to the Keelung station and connected to walk street
  - Moreover, to encourage and develop environmentally friendly transport between internal and external.
- Traffic external (outflow): to connect the green areas and other outside area, the bus system is placed before the station which is the center of circulation. From there, passengers can easily move to other place where they want to go.

**Technical Design**

The solar panel which is placed in the roof of station supplies clean energy sources and reduce emission.

Using roundabout intersection to ensure smooth circulation.

Using geotextile system at soft soil area and seismic resistance structural for high building reduce disaster risk.

Using green design.

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