BLOOM

Energy infrastructure as an ecosystem catalyst in a dry land.

The proposal's main idea is to bring the concept of a Hydro-Photvoltaic panel that combined photovoltaic cells with hygroscopic material to catch vaporization from hot air turned into a water source. The idea aims to provide a water source from the air integrated into the energy infrastructure which not only generates electrical power but also thrives and flourishing the surrounding living organism-environment during the drought season. Thus, the future of infrastructure has become a major rule in playing the role of an ecosystem catalyst in a city. Blooms idea will bring integrated hydro panel PV into a broad modular possibility with two variants, canopy-based form as the main unit and small mobile-unit. By looking at the tons of building construction wastes on-site due to the demolition and dismantling of the former military base, the proposal will be utilizing rubbles and construction waste to achieving net zero carbon emmision as a circular material scheme. Nature-based construction waste also will use in organic moist medium and can provide shelters and protection for existing living organisms surrounding the devices.





Drops generated by vaporisation inside the Hygroscope panel PV.

Moist chamber. Keep the organic medium and soil moist and encourage natural moos thrive.

Organic construction waste as moist medium and water filtering mimicking water spring.

Drop of water infiltrate the ground and flows into surrounding.

Siteplan & Surrounding Location



Masterplan



