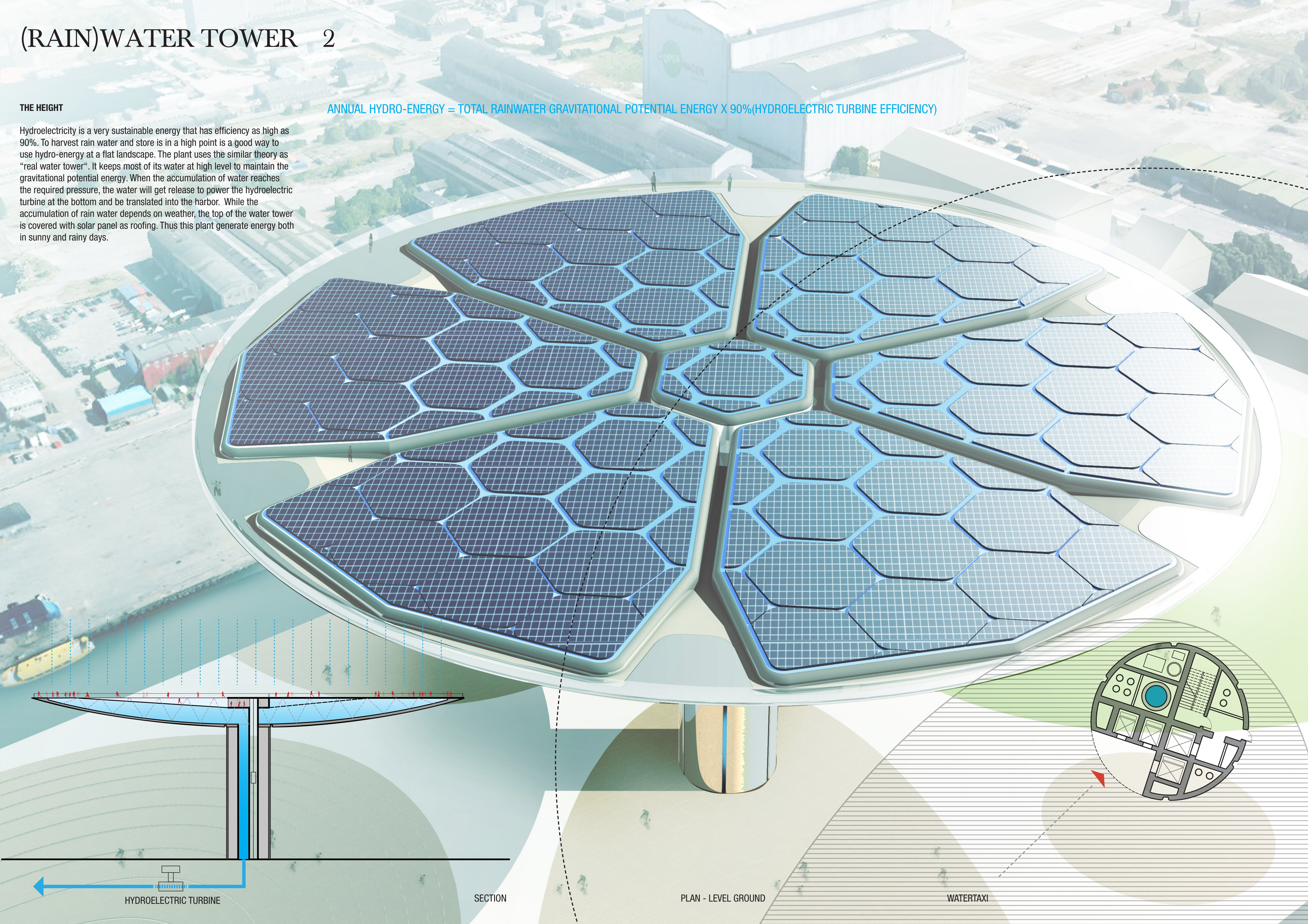


(RAIN)WATER TOWER 2

THE HEIGHT

Hydroelectricity is a very sustainable energy that has efficiency as high as 90%. To harvest rain water and store it in a high point is a good way to use hydro-energy at a flat landscape. The plant uses the similar theory as “real water tower”. It keeps most of its water at high level to maintain the gravitational potential energy. When the accumulation of water reaches the required pressure, the water will get release to power the hydroelectric turbine at the bottom and be translated into the harbor. While the accumulation of rain water depends on weather, the top of the water tower is covered with solar panel as roofing. Thus this plant generate energy both in sunny and rainy days.

$$\text{ANNUAL HYDRO-ENERGY} = \text{TOTAL RAINWATER GRAVITATIONAL POTENTIAL ENERGY} \times 90\%(\text{HYDROELECTRIC TURBINE EFFICIENCY})$$



HYDROELECTRIC TURBINE

SECTION

PLAN - LEVEL GROUND

WATERTAXI