**ABSTRACT**

**Concept: Urban Sponge**

**Purpose**

Copenhagen is a city having a deep history with the ocean water over time. With the development of the city, there is a shortage of land. The urban texture offers a rich fabric with intricate networks of urban streets, building blocks and integrated canals and river banks. As the city grows, it is gradually expanding into and over the ocean; growing territory and absorbing water within its perimeter.

**Strategy**

Our proposal is a poetic celebration of the city as a sponge: providing new solutions to the relationship between the old urban texture and the ocean – activating the coming land-shortage problem of Copenhagen. As an important component of the city locating at the interface between ocean and land, the site provides diverse and functional spaces for energy collection and social activities. The concept of sponge is more like creating a solid-soft surface showing the transformation from urban area to ocean water, and the interaction between social activities and energy collection.

1. Create axis to build the dialogue with little mermaid.

2. Integrate the soft surface with the solid surface as a edge on the urban space and ocean space.

3. Use energy columns and underground energy generator to transfer the tidal energy and gravitational potential energy to electricity.

4. Create multi-energy cores to storage and distribute the electricity.

5. Space with different scale for various activities and different energy form. At the same time, create silent space for people to feel the rhythm of the wave.

**Meaning**

The site can be viewed as floating on the ocean and the tidal energy is a highly potential energy resources to be used. The site generates electricity through collecting the tidal energy as well as providing diverse landform and spaces for social activities. The design creates a new urban living interface for people experiencing the rhythm of the energy. Total energy collected and stored can support self-use during night as and more than 650 households in surrounding communities.