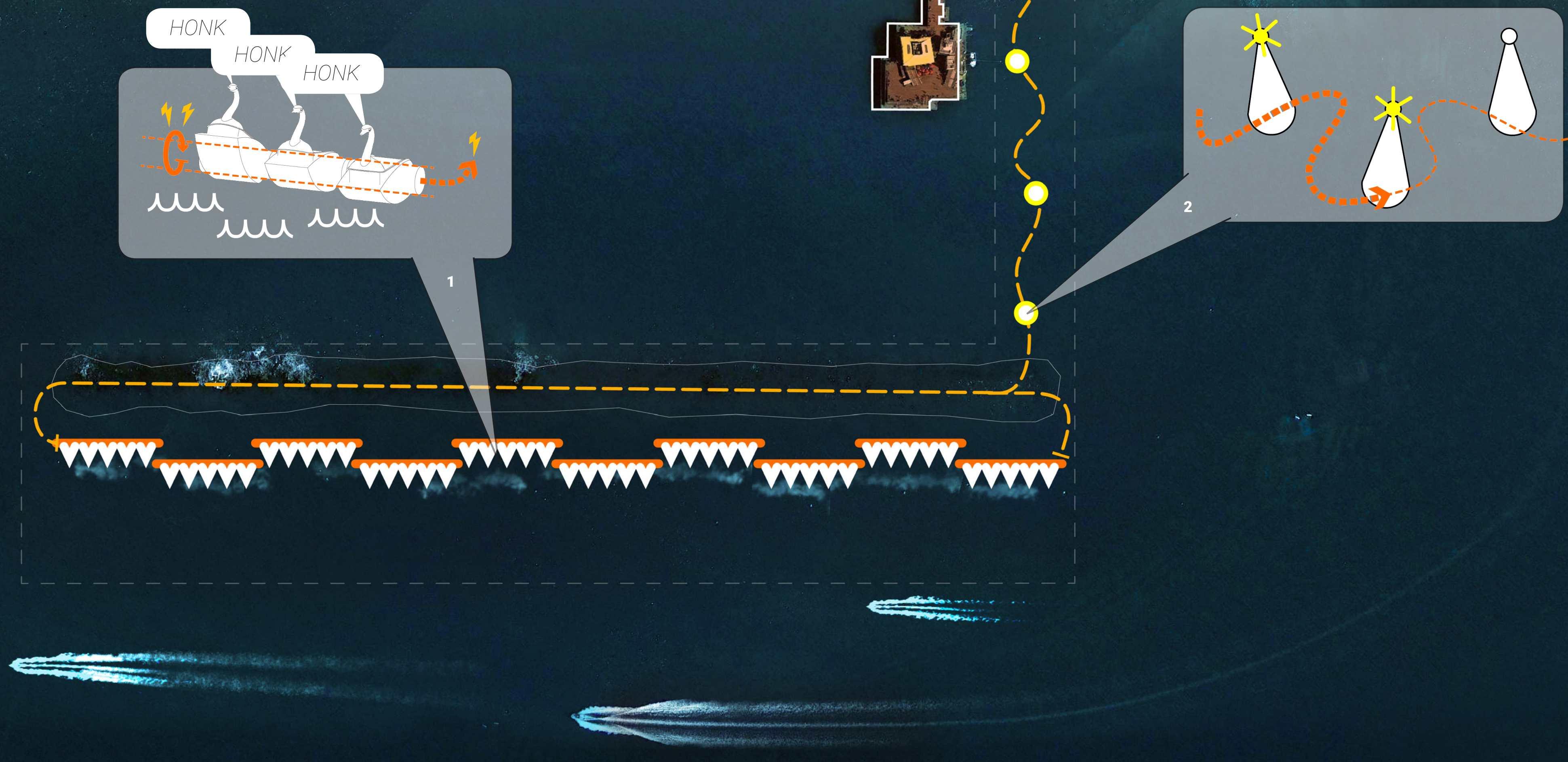


- 1 SWANS HARVESTING WAVE ENERGY WITH CELEBRATORY 'HONK'
- 2 ENERGY TRANSPORTED TO PIER WITH BUOYS DISPLAYING PROGRESS
- 3 ENERGY COLLECTED AND STORED WITH MARKER DISPLAYING GAINS
- 4 GOAL IS REACHED AND ENERGY IS DISCHARGE WITH PUBLIC LIGHT DISPLAY



The technology behind **WAKE UP** utilizes the most abundant and local force to the pier: the wake of the ocean. Wave Energy Converters are devices that use the natural motion of tidal movements to generate usable power. One such system was developed in the 1970's by professor Stephen Salter and dubbed "Salter's Duck". The Ducks consist of a series of wedge-shaped devices located at the ocean's surface with a central axis throughout, housing the mechanics to generate power. As a wave encounters the underside of the wedges, the force pushes the wedges upwards, causing rotation at the central axis. This rotation creates power through hydraulic generators, which can be stored and converted into usable electricity.

WAKE UP reuses the retired swan boats to function as Salter's Ducks generating offshore energy and helps power the pier's amusement park. The swan boat's body is modified, creating the necessary wedge shape, and a central axis links multiple boats together in staggered rows. The system is dubbed the *Salt Swan* in reference to Mr. Salter and the atypical presence of swans in salt water. The Salt Swans are deployed just beyond the existing breakwater line to capture the most wave energy. When waves hit the swans, they emit a celebratory honking sound as a spectacle for the public to enjoy, but more importantly is the public's understanding of how the system works.

The Salt Swans are linked to the shore by a series of lit buoys that display the level of charge, much like a gas gauge in a car. As the onshore battery fills up, the buoys begin to light up in a suspenseful sequence. At full capacity, a dedicated, swan-inspired high striker rings its bell. Moments later, a light show ripples through the amusement park in celebration.