A self-sufficient modern lighthouse

The lightline is a line formed by lights floating on the sea. Each floating light is the combination of a searchlight and a wave energy converter system - inspired by the SEAREV technology.

The relative movement between the float and the wheel, whose rotation is limited by the presence of a counterweight, actuates a hydro-electric system converting mechanical energy into electricity. The energy generated along the day is consumed by the lamp during its hours of operation, along the night. In order to optimize the energy management, which consists of balancing over-production and under-production periods, a submarine cable connects the lamps to a land-based control cabin.

The lightline is a minimalist concept. However, its design offers great conceptual power: the wave energy is beneficial not only to the lamp power supply but also to their visibility. Stronger the swell is, more energy is produced and wider is the oscillation of light beam...

Integrated concept

If the concept of the lightline is directly inspired by the Costa Concordia sinking, its characteristics can be adapted depending on different potential sites.

Regarding to the present site, the control cabin is designed as a promontory overlooking the sea. It includes a technical unit of energy management and a housing unit in the basement.

Finally, the number of lights (32) can offer a poetical vision of the 32 lives lost during the disaster, who are now working to protect boats from coastal reefs of Punta Gabbianara.