## **CESAR HARADA**

## PROTEI 2010 - ONGOING

Protei is a fleet of pollution-collecting sailing drones, developed primarily to collect oil spills. It was designed by artist Cesar Harada and an international team of contributors under Open Hardware licensing by Open\_Sailing, randomwalks, V2, and Amorphica. The in atable drones are intended to be inexpensive, semiautonomous, self-righting, hurricane-ready alternatives to current oil spill collection technology, which, according to Harada, collects only three percent of the spilled material.

## IDEA

New Way of Oceans Cleaning

Thinking of a new way of cleaning the sea with a "new" sailing boat (a revolutionary, shape-shifting, oil spill cleaning, sailing robot) and ideas with technology of using the power of the sea to help.

Man Made Problems in the sea, controlled by nature forces - oil, plastic and radioactivity → if we have the power to make the problem, we should have the power to solve the problem



700 boats

- white Oil absorbent
- orange Oil barricade = 3% cleaned

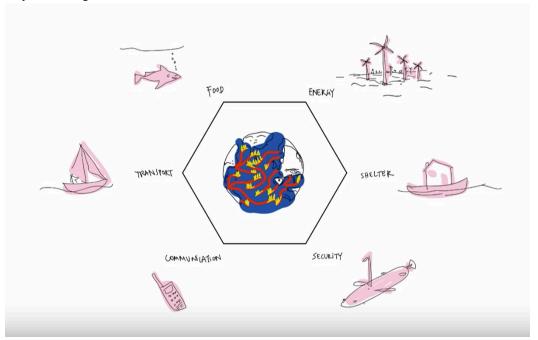




changing shape of the sailing boat → while turning wind from both sides = more speed and pulling power

With a new design of a boat (long tradition of sailing) new possibility of using wind power and sea power to redone man made problems.

## Way of thinking for and with the ocean



https://www.kickstarter.com/projects/cesarminoru/protei-open-hardware-oil-spill-cleaning-sailing-ro

http://www.bluebird-electric.net/oceanography/Ocean\_Oil\_Spills\_Cleanup/Protei\_Oil\_Spill\_Robot\_Sailing\_Boat\_Cesar\_Harada.htm