

## CLIIN APS

The World's first on board Hull cleaning Robot for shipping industry efficiency while reducing its environmental impact.



### Company Description

CLIIN ApS has invented a robot that can assist ship's crew in cleaning the cargo holds of a ship and are developing an extensive patented world's first on-board autonomous Hull Cleaning Robot (HCR). The HCR is able to keep the hull of a ship clean from microorganisms, algae and animal fouling (biofouling) at all times.

Soborg, Denmark  
[www.cliin.dk](http://www.cliin.dk)  
Founded in 2016  
20 Employees

Field of Activity:  
**Maritime**

Capital raised:  
**EUR 4m**

Investment need:  
**EUR 3m**

### Problem

Biofouling invokes significant costs on the shipping industry. Annually the shipping industry is consuming 400 billion tonnes of heavy fuel oil/1.4 trillion USD, contributing to more than 1 trillion tonnes of CO2. In addition, ships are carrying invasive species on its hull introducing those to local marine eco system representing a threat of extinction to local marine life.

### Solution

The HCR solution consists of a permanently installed on-board mobile docking station and an autonomous cleaning robot. It navigates the ships' hull in a predefined pattern and cleans the hull surface every 2-3 weeks keeping the hull clean at all times. The robot is equipped with cameras, and can document the cleanness of the hull. The HCR solution target all ships globally above 5.000 dwt (app. 90,000 ships).

### Market

It's a global market and large. Initially we target all major shipowners globally. Total market size is app. 90.000 ships with one or more robots pr. Ship.

### Business Model

CLIIN is leasing out the robots with a downpayment and monthly fee. We are looking for strategic partners in US, Japan and Australia, where dialog with candidates have already begun.

### USP & Differentiation

First of its kind proactive cleaning solution. No other similar solution in the market today. Significant fuel savings, significant reduction of Greenhouse gas emissions, avoid transportation of invasive species on the hull of the ship and improved safety (compared to diver cleaning).

Give your feedback