

#### **Start Up 4: Ocean clean up project** **<https://theoceancleanup.com/oceans/>**

It all started when then 16-year-old Boyan Slat was scuba diving in Greece and was surprised to see more plastic than fish. What surprised him even more, after digging deeper into the plastic pollution problem, was no one had made serious attempts to combat this issue. The question “Why don’t we just clean it up?” lingered in his mind, and led him to devote his high school science project to understanding the problem, as well as researching why a cleanup was considered impossible.

Trash accumulates in five ocean garbage patches, the largest one being the [Great Pacific Garbage Patch](#), located between Hawaii and California. If left to circulate, the plastic will impact our ecosystems, health, and economies. Solving it requires a combination of closing the source, and cleaning up what has already accumulated in the ocean.

In December 2017, they published a paper in *Environmental Science & Technology* about pollutants in oceanic plastic, based upon data from the Mega Expedition. They found that 84% of their plastic samples had at least one [persistent organic pollutant](#) in them exceeding safe levels. Furthermore, they found 180 times more plastic than naturally occurring biomass on the surface in the Great Pacific Garbage Patch.[\[56\]](#)

On March 22, 2018, The Ocean Cleanup published a paper in *Scientific Reports*, summarizing the combined findings from the Mega- and Aerial Expedition. They estimate that the Patch contains 1.8 trillion pieces of floating plastic, with a total mass of 79,000 metric tonnes. [Microplastics](#) (< 0.5 cm) make up 94 % of the pieces, accounting for 8% of the mass. The study suggests that the amount of plastic in the patch increased exponentially since 1970.[\[57\]](#)

The Ocean Cleanup is mainly funded by donations and sponsors. As of November 2019 it has made a little over \$35 million from sponsors including [Salesforce.com](#) chief executive [Marc Benioff](#), philanthropist [Peter Thiel](#), [Julius Baer](#) Foundation and [Royal DSM](#).[\[60\]\[61\]](#) The Ocean Cleanup raised over 2 million [USD](#) with the help of a [crowdfunding](#) campaign in 2014.[\[62\]](#)