



4ocean founders Alex Schulze and Andrew Cooper on one of their work boats.

4ocean - The American Dream to Stop an International Nightmare

BY MARILYN DeMARTINI

Photos Courtesy of 4ocean

4ocean — the name says it all. Its inspiring story explains how the ubiquitous glass bead bracelets, seen on wrists around the world, are creating a tsunami of a movement to reclaim and reuse ocean plastics. But the truly amazing part of the evolution of the 4ocean company is that two, young, South Florida surfers became trailblazing entrepreneurs nearly overnight and now seek to totally disrupt the plastics industry—worldwide.

When Andrew Cooper and Alex Schulze went to Bali on a surfing vacation after graduating from Florida Atlantic University, they didn't know it would be life changing. They were horrified when surrounded by the tremendous amount of plastic refuse on the beaches and were puzzled by the fishermen coming in with nets filled with plastic and throwing the trash back into the water. When asked why, the fishermen answered, "We are paid to catch fish, not plastic." So their brains started spinning on how to turn the problem around. They asked themselves, "What if we could pay fishermen to pick up plastic instead of fish?" And, with that, they went back to South Florida and formulated a plan.

Creating a unisex, recycled product that they could sell to raise money to get the plastic out of the oceans and off the beaches became their vision. Some thought they were crazy, but some thought it would work, and before long, Cooper and Schulze quit their day jobs and started an LLC, a website, and an e-commerce and social media plan to sell totally recycled product bracelets at \$20 each to accomplish their goal—cleaning the ocean one pound at a time.



The 135-ft. 4ocean ship has been converted to clean plastic from the sea.

Just two years later, 4ocean is headquartered in Boca Raton, Florida, has led clean-ups in 27 countries, has established collection centers in Bali and Haiti, and has Hispaniola and other international markets in its sight. The company employs over 300 people, has 22 vessels and recently purchased a 135-ft. commercial boat with a deep-sea boom, barricade, and crane system that can operate at river mouths, where its panga fishing boats are too small to maneuver. The company has already removed more than four million pounds of trash from the oceans and coastlines—and that doesn't even count what its volunteers have amassed in hosted ocean cleanups around the country. A real-time "trash tracker" on their website keeps count, and videos tell compelling stories of the company's establishment and growth.

"We did not come from ocean clean-up backgrounds," says Cooper. "We are ocean lovers who saw the devastating state of plastic pollution and wanted to clean up the mess at our feet. We would have done it with a giant plastic magnet

if we could, but even if we did, we'd have to clean it up again because we'd still have the problem tomorrow."

Since an estimated 90% of plastics found in the ocean are land-based, 4ocean took on the challenge not only of gathering and recycling plastic, but also of preventing plastics from getting to the ocean. Recognizing the huge industries built on the use of plastic and everyday items like cutlery and containers for personal hygiene and medicines, the team adopted a three-pronged approach:

1. Refuse – stop single-use plastics—especially bags and bottles.
2. Recycle – be responsible and stop it at the source—don't let it get to the ocean.
3. Recover – participate in beach clean-ups, bring a net when you go boating to pick up, and properly dispose of plastic and trash.

Having lived in Florida where municipalities, waste removal companies, and



concerned citizens joining non-profit organizations manage the domestic plastic problem, the duo had an eye-opening experience in Bali. They learned that in areas of high population and poverty, where there is no waste management infrastructure, people throw trash in the street, where it ends up in gutters and then in streams. River mouths are where most trash gathers, so they looked at how to collect the trash and plastic at the source before it washes out to sea. Another part of the plan was educating communities on the benefits and logistics of proper trash disposal.

They began in Bali where they hired fishermen who used their river and ocean boats to "catch" plastic then bring it ashore to sort, clean, and store for eventual use. They have recruited more than 700 volunteers and their families for beach clean-ups, and Bali was established as the 4ocean international headquarters.

While in South Florida, an ironic situation brought the team's attention to another poverty and pollution-stricken target location. Yellow, plastic bottles embossed with "vinegre" were being found on beaches. Recognizing the Creole word for vinegar, the bottles were traced all the way back to Haiti. Cooper and Schulze went there and found rivers of plastic discarded on the streets. In addition to all the daily trash, they found out that Haitians transported water in plastic bags, and then discarded the bags, with a multiplier effect. Now, 4ocean pays locals to pick up trash and hired 40 fishermen, using 22-ft. panga boats, to pick up plastic—and made it more profitable than fishing, especially where native fish were not living long enough to be big enough to eat. The company built its own cleaning facilities and now has 15-20 beach teams to gather, sort, bale, and take trash to third party recycling facilities on the island seven days per week.

Cooper and Schulze realized a major part of the problem is the companies that heavily use plastic—the grocery, medical/pharmaceutical, and cosmetic/personal hygiene industries—are huge and slow to change.



A littered Haitian beach.



They see these markets in need of disruption and seek to provide sustainable and convenient solutions to single-use plastics. The amount of recovered plastic to date is much more than can be immediately recycled, so quantities of it are stored. In the interim, 4ocean is working to create more products made from recovered consumer plastics—like the bracelets, made from RPET (water bottle-type plastic), with beads made from recovered glass bottles. Each bracelet is ocean-themed with a stainless steel charm, so they can be purchased in multiples to create collections. They are recyclable, as well, once the stainless charm is removed. 4ocean is also producing branded, insulated, reusable water bottles and hopes to announce more products soon. In proving the commercial success of this retail model, the team hopes to inspire more entrepreneurs to seek other ways to capitalize on the problem, turning solutions into more profitable businesses.

“You don’t have to be a non-profit to ‘do good,’” says Schulze. “We want to be living proof, and have new companies follow in our footsteps, and show that you can control a company with a vision. We can create a huge disruptive chain of companies,” adding that other recovery and recycling companies and those

seeking to use ocean plastics can impact change.

The logistics and politics of plastics became such a large undertaking that 4ocean is working with the United Nations and large waste management companies to tackle the problem at the source. While it is important to do the clean-up, 4ocean recognizes it is still “reactive” and sees the final solution is to be proactive and to end the problem at its source.

Jackie Price, 4ocean’s director of international operations, explains the complexities of recycling and the circular economy of handing everything from planning to packaging. Once gathered, the plastics have to be divided into seven different types, from bottles and tops to plastic bags, toys, straws, food containers, and even items like disposable Styrofoam coolers and diapers. Metals and glass must be sorted and some recyclers only take certain amounts and types of product. Price cites the chemistry involved in the blending and treatment of containers to create various products including “food grade” materials. Bottles need to be processed into pellets or flakes to be repurposed, and more options and cost-effective uses need to be investigated.

Even transport of materials is an issue—getting vast quantities of pellets to

injection molding companies, as more products like recycled furniture, playground fixtures, drinking cups, and fabrics are being made from recycled plastic. Yet many ocean plastics like bleach and laundry detergent containers are not considered recyclable, and much of it is difficult to sort and clean as it is covered in muck, oil, and contaminants.

4ocean sums up its approach in its own acronym:

- O – Optimizing technology for recycling to prevent, intercept and remove trash from the ocean
- C – Creating jobs
- E – Educating on the impact of plastics in the ocean (114 aquatic species have been found to have ingested microplastics)
- A – Awareness-raising and changing behavior
- N – New global economies—giving plastic value and creating new jobs and products

Cooper and Schulze explain that 100% of the sales of 4ocean products go to clean-up—funding their company, its resources, equipment, paying salaries, and expanding to new markets. Since an LLC cannot accept donations, product sales remain its business model and it appears to be working extremely well. The 4ocean mantra, “Let’s end the ocean plastic crisis together,” can be shared by many, creating a movement, led by two young surfers who, rather than expecting someone else to do it, chose to change the world. 🌊



FISHERMEN Turned Plastic Warriors

There's that clever but well-worn adage we all know: *Give a man a fish and he'll eat for a day; teach a man to fish and he'll eat for life.* Now, with rivers of plastics invading our oceans, a new saying has emerged: *Give a man a net and he can catch dinner; teach him how to use a net to collect plastic garbage, and he can sell it and buy his dinner.* Okay, I'll admit, the new adage needs a lot of wordsmithing. It's just not as catchy as the classic. Yet, the idea is simple. Fishermen in the third world can make more money collecting plastic trash than catching fish. It's a paradigm shift dreamed up by the savvy dudes at 4ocean.

The transition began in Bali when the 4ocean founders watched in horror as a fisherman pulled in a net full of plastic trash and only a few fish. The guy began tossing the plastic back into the ocean and carefully placing the fish in a bucket.

"Please don't throw that plastic back," they pleaded. To which he flatly replied, "I don't get paid to collect trash."

That was then. Now he does get paid to clean plastic from the sea because that's the 4ocean business model. That and selling bracelets faster than ice cubes in hell.

"We pay above the minimum wage in both Haiti and Bali," they said.

As news spread rapidly, fishermen hung up their nets and the fisherman-turned-plastic-warrior program exploded. In Haiti, where the average wage is around \$4 per day, they earn more money by doing good for the ocean.

The beauty of the ingenious plan is two-fold. One, many poor countries have decimated the local fish populations just to feed themselves. So, removing fishermen from the equation gives the fish a chance to rebound. Two, offering a struggling fisherman the chance to make more money and clean up his local waterways creates a lot of goodwill. So, fishermen have more cash and the ocean has less trash. Hmm, more cash, less trash. That's a bumper sticker just waiting to happen. Note to self: copyright that term.





To date, there are 40 fishermen in Haiti who have converted. They utilize eight panga boats and are in the process of designing a boom collection system to trap plastic as it spews out of the highly polluted Saint Marc River before it makes it to the open ocean. In Bali, according to the 4ocean peeps, some of the plastic saints split their time between fishing and collecting plastics.

This new plastic currency has had a profound effect on local communities, especially in Haiti where jobs are extremely limited and the poverty rate is almost 60%. Having a steady income above average minimum wage, helping to clean and restore their ocean communities, and a feeling of hope has brought a new awareness to the country. In fact, it's created a movement to try and stop plastics at the source, even before it reaches the seashore. And, local schools are touring the 4ocean facilities in both Haiti and Bali to educate students on the impact of ocean plastic and trash.

From students learning the insidious impact of plastic pollution to workers in Haiti lining up at the door to work for 4ocean, the battle against plastic is gaining more and more soldiers. It's going to take armies of us all to chip in and do our part if we're going to win this war. 🙏



A class of students in Bali tour the local 4ocean facility.