Using ocean plastic, Adidas concept shows shoe rethink

December 12 2015, by Nancy Owano

In an interesting lemons-to-lemonade development, plastic ocean waste has served as material for a 3D-printed shoe. The makers are Adidas. Together with Parley for the Oceans, a group fighting ocean pollution,

the shoe concept was revealed in a well-timed announcement in step with the Paris climate talks.

Eric Liedtke, Adidas Group executive board member responsible for global brands, said, "Together with the network of Parley for the Oceans we have started taking action and creating new sustainable materials and innovations for athletes."

The concept shoe consists of an upper made with ocean plastic content and a 3D-printed midsole, which is made from recycled polyester and gillnets.

The Maritime Executive said "It's estimated that lost and discarded gillnets, known as ghost nets, are responsible for more than 100,000 marine mammal deaths every year."

"2015 is our year, the year of the oceans: the ocean movement successfully brought the cause onto the COP21 agenda in Paris," said Cyrill Gutsch, founder of Parley for the Oceans. "Protecting life underwater became the 14th development goal of the United Nations."

Uh, just wait a minute. Or three. "We haven't figured everything out yet but we continue to move forward," Liedtke said in *EcoWatch*. "It's more a statement of intent of what we hope to do and a challenge for us to make it."

Nonetheless, their announcement indicates an impressive action, as the 3D-printed ocean plastic shoe in concept stage may show how the industry as a whole can rethink design while helping to curb ocean plastic pollution.


PARLEY
adidas

The Verge noted that the shoe is based on the design of Adidas' Futurecraft 3D, a 3D-printed shoe concept which was unveiled earlier this year.

Edgar Alvarez, associate editor, *Engadget*, talked about the Futurecraft 3D protoype —a running shoe made partially with 3D-printed materials—that is, with the midsole as the 3D-printed piece. Alvarez said the most interesting thing about the shoe is the way it opens possibilities for a more personalized shoe.

"With Futurecraft 3D, Adidas says it aims to make pairs based on each individual's needs. That custom-made approach means the shoes would match your own footprint elements, including contour details and precise pressure points."

In October, Adidas issued a news release about Futurecraft 3D, described as a prototype and a statement of intent. The company presented its vision: "Imagine walking into an adidas store, running briefly on a treadmill and instantly getting a 3D-printed running shoe – this is the ambition of the adidas 3D-printed midsole. Creating a flexible, fully breathable carbon copy of the athlete's own footprint, matching exact contours and pressure points, it will set the athlete up for the best running experience. Linked with existing data sourcing and footscan technologies, it opens unique opportunities for immediate in-store fittings."

The announcement said Futurecraft 3D was possible through an open

source partnership with Materialise, specialists in 3D printing.

When any initiative to clean up the environment is under way, environment watchers look to see how the end to end process is effective in avoiding energy waste and pollution. James Vincent, London reporter for *The Verge*, remarked: "what's the point of dredging plastic waste from the ocean to make your running shoes if the process of recovering, reforming, and 3D-printing that material is, itself, environmentally damaging."

More information: news.adidas.com/US/Latest-News … da-9b8b-f9e2596569b1