

A mobile solar-powered recycling plant that turns trash into tiles

April 26 2017, by Bob Yirka



Credit: Miniwiz

(Tech Xplore)—A team of researchers with Miniwiz has developed a mobile recycling plant called the Trashpresso that can be hauled between locations. In addition to its mobility, it's also solar powered, making it

useful for communities with limited recycling facilities.

Miniwiz is a Taiwan-based design [company](#) that has dedicated itself to coming up with novel ways to create recycling opportunities—they came up with Polli-Bricks, for example, which are bricks made from plastic refuse. They also developed the Hymini, a portable solar, wind and hand-crank power generator made from recycled ABS, and a Nike concept store in Shanghai built using only material recycled from cans, bottles and DVDs.

Products from the company use [recyclable material](#) to produce usable products that the company describes as "upcycling solutions." In this new initiative, the company sought to provide out-of-the-way communities a means for recycling at least some of their trash—in this case, fabric and molded plastic. Such materials are tossed into the Trashpresso and the machine washes it, tears it apart and then melts it to form individual tiles that can be put together for indoor or outdoor flooring or other applications. They note that one tile is made of approximately five [plastic bottles](#). The machine can create 108 square feet of them in about 40 minutes.

Making the recycling system more useful is the fact that it folds down to fit inside a 40-foot container that can be pulled by a truck. Once it arrives at a site, it is fully self-sufficient—it runs on electricity courtesy of a solar power generator and recycles its own waste water.

The Trashpresso was shown off at this year's Earth Day celebrations in Shanghai and will make its working debut this summer at several sites in NianBao Yuze, which is on the Tibetan Plateau—tourism there has led to a large amount of [plastic](#) waste—the new machine will be part of both a [recycling](#) effort and an education platform. Representatives of Miniwiz plan to also show the National Geographic documentary series *Jackie Chan Green Hero*.

More information: www.miniwiz.com/home.php

© 2017 Tech Xplore

Citation: A mobile solar-powered recycling plant that turns trash into tiles (2017, April 26)
retrieved 20 March 2024 from <https://techxplore.com/news/2017-04-mobile-solar-powered-recycling-trash-tiles.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--