

Bike-path made from recycled plastic opens in the Netherlands

17 September 2018, by Bob Yirka



Credit: PlasticRoad

Officials with the Dutch city of Zwolle have announced the opening of a new bike path made using recycled plastic. The bike path is part of a nationwide effort to recycle more user end products. The bike path was made using a modular design called PlasticRoad by a pipe-making company called Wavin.

The idea for the bike path was conceived by Anne Koudstaal and Simon Jorritsma who work for KWS—a company that makes roads. KWS and Wavin were joined by petroleum giant Total in designing the PlasticRoad concept.

The bike path is 30 meters long and runs from Verenigingstraat to Lindestraat in Zwolle. Officials with Wavin report that the modules making up the bike path used the equivalent of a half-million [plastic](#) bottle caps and approximately 218,000 plastic cups. Recycled plastic accounted for approximately 70 percent of the PlasticRoad material. The modules were created using a hollow design—at the top is the road surface—beneath it is a hollow area that can be used for draining. A

frame holds the top and bottom pieces together.

The researchers also added sensors in the hollow section to count traffic and monitor wear and tear on each module. Installation of a stretch of roadway or bike path is done by excavating the ground and then laying the modules one by one. Each module is then connected to adjacent ones to provide a seamless ride for bike riders. Wavin officials claim the modules are easy to install, very lightweight and are more durable than asphalt. They are made with circular production methods, which means that when a module wears out, it can be melted down for production of new modules.

The Netherlands is a prime location for such a bike path, biking is very popular there—the country has 22 million bikes for just 17 million people. And the bikers are supported by a vast infrastructure dedicated to their use—the city of Amsterdam, for example, has approximately 800 km of bike paths.

Officials with Wavin report that a second bike path is to be installed in the town of Giethoorn—both pilot projects are meant to test the idea of using recyclable plastics for building bike paths and perhaps roadways.

More information:

www.plasticroad.eu/en/opening-...e-path-in-the-world/

© 2018 Tech Xplore

APA citation: Bike-path made from recycled plastic opens in the Netherlands (2018, September 17) retrieved 20 June 2021 from <https://techxplore.com/news/2018-09-bike-path-recycled-plastic-netherlands.html>

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.