



3D-printed furniture

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## 3D-PRINTED PUBLIC FURNITURE IS FULLY RECYCLABLE



### **A design studio in the Netherlands uses 3D printing to turn plastic waste into public furniture that encourages citizens to co-operate.**

Plastic is a commonly used material but some of the properties that make plastic so useful, like its low cost, light weight and durability, also make it hard to dispose of. Even with the increased awareness to recycle, a great deal of plastic still ends up being thrown away. To help in these efforts, **The New Raw**, a design studio based in Rotterdam, has developed a research project called **Print Your City**, which explores ways to recycle plastics into public furniture through 3D-printing.

According to The New Raw, residents of Amsterdam produce around 23 kilograms (50 pounds) of plastic waste each year. Print Your City sources 3D printing pellets made from municipal waste to create the XXX bench. It takes around 110 pounds of pellets – the annual plastic waste from just over two people – to create one bench. Print Your City invites citizens to not only participate in the material collection but also in the design process, thus increasing recycling rates and resulting in customizable parts that better fit the needs of their neighborhood. The bench is intended to provide seating for up to four people, with twists and curves integrated into the design to not only encouraging our greater recycling efforts, but also to invite citizens to socialise with one another who need to co-operate to keep the bench from falling over. The XXX bench is also fully recyclable.

The New Raw hopes that the XXX bench will serve as a prototype for 3D printing in a wide variety of public products, such as playground equipment, bus shelters, trash cans and out of waste plastics.

Print Your City joins other recent efforts, such as [compostable bottles](#) and reusable [smart cups](#), to help people cut down on their plastic use and keep plastic waste out of landfills and oceans. The project is supported by the [Technical University of Delft](#), and sustainable waste company [AEB Amsterdam](#). Can projects like Print Your City succeed in increasing your awareness of the ongoing need to recycle plastics?

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