

# Solar Powered Sol-Char Toilet Zaps Poop into Fertilizer Bricks

Source: [inhabitat.com](http://inhabitat.com)

Published: March 19, 2014

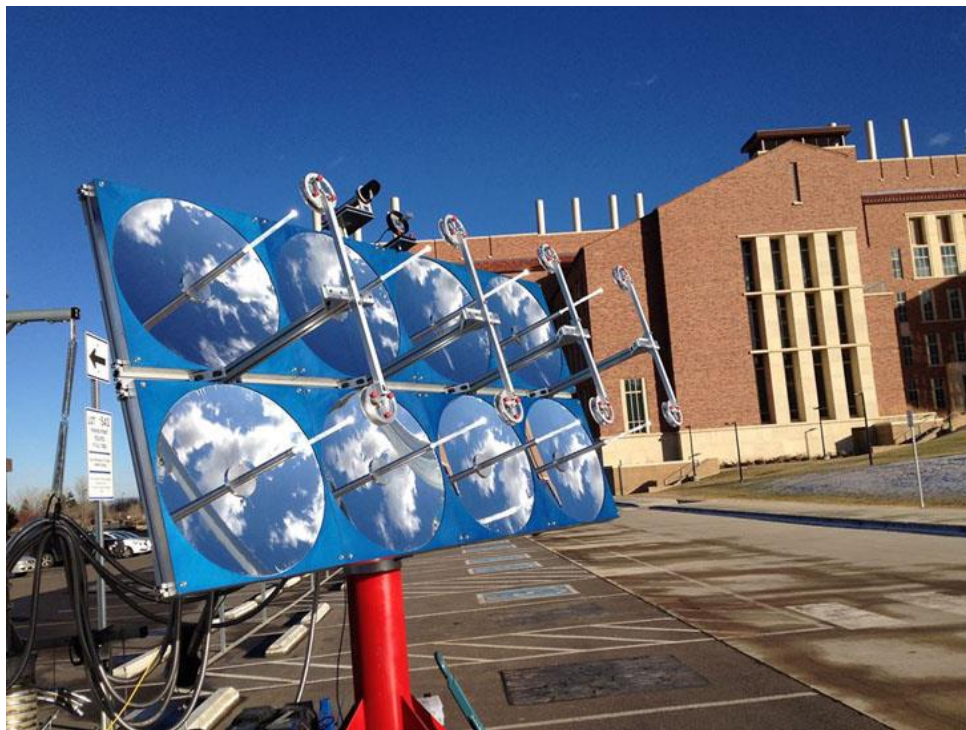


The Sol-Char solar powered toilet zaps poop into useful biochar briquettes.



by [Lori Zimmer](#)

Researchers at the University of Colorado designed a new toilet called the [Sol-Char](#) that [zaps poop into biochar](#) using nothing but the sun. Led by Karl Linden, the team installed fiber-optic cables that scorch waste deposited in the toilet to yield dainty briquettes of biochar. These bricks of sanitized [human waste](#) are then used as fertilizer, which will hopefully give farmers in developing countries a much-needed boost.



The Sol-Char toilet is outfitted with [eight parabolic mirrors](#) that reflect the sun's rays and divert it to a postage stamp-sized point. Up to 700 watts of solar energy collected at this point is then directed to cables in the reaction chamber system, which helps to burn the poop inside with temperatures reaching a whopping 600 degrees Fahrenheit. The burned-up poop then has a charcoal-like quality, making it easy to transport, distribute, and use in soil.



The high-powered poop burning outhouse was built as part of the [Bill and Melinda Gate's Foundation's Reinvent the Toilet challenge](#), fulfilling its mission to create a sustainable and [useful toilet](#) that could aid developing nations by utilizing the power of poop. The Sol-Char not only sanitizes human waste without the need of expensive infrastructure, but it also yields a useful byproduct that can help boost farm and crop production in developing countries. The off the grid Sol-Char was created with a grant of \$777,000 and \$1 million from the Gates Foundation.

---