

Search Technology

Inside Technology

Bits Blog »

Personal Tech »

Internet Start-Ups Business Computing Companies

Digital Cameras Cellphones ALL PRODUCTS

Water Recycling Shower Wins \$684,000 in the Green Challenge

By CIARA BYRNE of

Published: September 15, 2011

“The average teenage girl (according to a UK-based survey) spends 16 minutes in the shower. 16 percent of them spend more than 30 minutes.” says Nick Christy. Christy’s [company Water Recycling Shower](#) just won the [Dutch Postcode Lottery Green Challenge](#) and can potentially save cash-strapped parents, and the rest of us, 70 percent on the cost of heating their shower. The prize of \$684,000 will be used to refine the product and get it to market more quickly.

SIGN IN TO E-MAIL

PRINT

More News From VentureBeat

- Union Square Ventures Raising Up to \$200M for Fourth Fund
- Raptr’s Gamer Social Network Surpasses a Million Daily Active Users
- Immersion’s Touch Feedback Gets Into Fujitsu Smartphone
- YouTube Adds Basic Video Editing Features and Instagram-Like Effects
- Ooma VoIP Goes Wireless With Telo Air Adapter

“Most of the energy in your hot water system is lost. It’s never used.” says Christy. A typical shower uses at least 3 litres of drinking water, and 22-48 percent of the energy used to heat a shower is lost in storing warm water which then goes cold in tanks and pipes within a household.

The recycling shower captures water you have already used in a reservoir, which is likely to be built into the base of the shower. The water is then filtered in a component called a hydrocyclone, which uses similar technology to a Dyson vacuum cleaner, and spins the water around to separate out any heavier particles or materials. The 70 percent of

the water that survives this filtering mechanism is pasteurized to kill any bacteria and redirected back into the shower head. The whole real-time, recycling process takes a mere 25 seconds and reduces the amount of water used in an average shower by 70 percent. Since you are recirculating water which is already warm, energy costs are further reduced over heating cold mains water.

The inventor of the shower technology, Peter Brewir, is a director of Water Recycling Shower. He also [invented concrete canvas](#), a fabric that, when sprayed with water, turns into concrete with 24 hours. Concrete canvas allows solid structures to be built quickly in disaster zones.

According to Christy, showering is the second largest energy cost in most households. In markets like Australia, where the company is based, water shortages are also a problem. “When I moved to Australia at the end of 2007, there was a really bad drought.” Christy explained. “In Brisbane the water was down to 16 percent in a city of 2.1 million people. You were supposed to limit your showers to four minutes. You see what people do when there is no petrol. You can imagine what they are going to do when there is no water.” Based on the current cost of water and energy in Australia, the recycling shower would save around \$185 per person per year. However, the Queensland Water Commission estimates that water heating costs in that area of Australia will double by 2016.

Christy estimates that the shower is currently around 18 months away from market. The company will sell directly to consumers. The whole package will consist of a replacement for the current shower’s thermostat and showerhead, a reservoir to collect used water and a briefcase-sized unit containing the filtering system.

The first target market for the recycling shower is the United Kingdom, where 50 percent of the population already uses an electric shower. One possible disadvantage of the shower in other markets is that it requires a higher power supply to be available in the bathroom (40 Amps as opposed to the usual mains power of 15-20 Amps) because the filtering system uses a lot of energy during a shower. Bathrooms with electric showers will already

Log in to see what your friends are sharing on nytimes.com. Privacy Policy | What’s This?

Log In With Facebook

What’s Popular Now

Lamponing Leaders, Talk Show Channels Young People’s Anger in South Korea



Dorothy Rodham, Mother of Hillary Clinton, Dies at 92



Subscribe to Technology RSS Feeds

Technology News

- Internet Start-Ups Business Computing

Bits Blog

- Personal Tech Pogue’s Posts

MOST E-MAILED

MOST VIEWED



1. OP-ED COLUMNIST The Wrong Inequality



2. OP-ED CONTRIBUTOR A Sister’s Eulogy for Steve Jobs



3. PROFILES IN SCIENCE | MICHAEL S. GAZZANIGA Decoding the Brain’s Cacophony



4. A Nursing Home Shrinks Until It Feels Like a Home



5. OP-ED CONTRIBUTOR Israel and the Apartheid Slander



6. A Last Bastion of Civility, the South, Sees Manners Decline



7. Well: A Thanksgiving Feast, No Turkeys Allowed



8. The Stone: An Interview With A.C. Grayling



9. A Tumor Is No Clearer in Hindsight

10. Stanley Fish: My Life Report

Go to Complete List »

Show My Recommendations

have such a connection. The initial cost will be around \$2,365 per shower. Christy says that an average household should save enough within the first 3 years to cover the initial investment.

The recycling shower has one competitor in a company called [Quench Showers](#), also based in Australia. Quench's shower system divides a shower into two phases: soaping and rinsing. 100 percent of water used in the rinsing phase is reused after the water is filtered, pressurised and heated. There does [seem to be a rather inconvenient wait](#) between the soaping and rinsing phase.

A future Water Recycling Shower feature that is bound to be popular with parents of teenagers everywhere, is the shower remote control. No more endless showers for Madam, unless she likes them cold.

Water Recycling Shower was founded in 2009, has one employee (the Green Challenge prize will mainly be used to hire engineers), is based in Brisbane Australia and is privately funded.

Filed under: [green](#), [VentureBeat](#)

Copyright 2011 VentureBeat. All Rights Reserved.

VentureBeat is an independent technology blog. [Read More »](#)

SIGN IN TO E-MAIL
PRINT

SPONSORED HEADLINES

[What's This?](#)

Home & Garden Ideas

How to Make Fantastic Cinnamon Buns

Real Simple

5 Things You Shouldn't Say to a Recent College Graduate

Architectural Digest

Ricky Carmichael

typeF.com

What Colors Are Good With Purple Boots?

INSIDE NYTIMES.COM



HEALTH »



A Thanksgiving Feast, No Turkey's Allowed

OPINION »



Room for Debate: China's Health Care Crisis?

U.S. »



Hay Shortage in Drought-Stricken Texas

T MAGAZINE »



Lumière | Closin' Up the Ritz

OPINION »

The Stone: An Interview With A.C. Grayling

The philosopher discusses the challenges of creating meaning in our lives.

ARTS »



Similarity to Real People Is Completely Intended

[Home](#) | [World](#) | [U.S.](#) | [N.Y. / Region](#) | [Business](#) | [Technology](#) | [Science](#) | [Health](#) | [Sports](#) | [Opinion](#) | [Arts](#) | [Style](#) | [Travel](#) | [Jobs](#) | [Real Estate](#) | [Autos](#) | [Site Map](#)

© 2011 The New York Times Company | [Privacy](#) | [Your Ad Choices](#) | [Terms of Service](#) | [Terms of Sale](#) | [Corrections](#) | [RSS](#) | [Help](#) | [Contact Us](#) | [Work for Us](#) | [Advertise](#)