Energy-Out of the Box

by TidewaterCurrent

News and information relating to unique energy systems.







A startup that squeezes electricity out of city water

washingtonpost



TidewaterCurrent "Rentricity, which has developed equipment that uses water pressure to produce electricity and helps water suppliers reduce their energy costs."

December 15, 2012



More Exercise Cycles, Treadmills Feed The Grid «

earthtechling



TidewaterCurrent 1.12.13 - "Sports Art Fitness, a company that makes exercise machines specifically designed to pipe human-generated power to the grid, says the appropriately named "Green Room" at Tennessee Tech University is the latest gym to go this route with its gear."

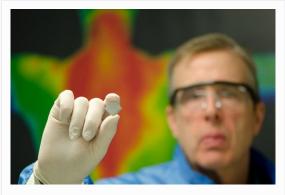


Pavegen kinetic energy tiles seek crowd-funding for school installations

gizmag



TidewaterCurrent "In a nutshell Pavegen is a system which converts the kinetic energy of people's footsteps into electricity. It manages this by utilizing tiles built into the floor which, when stepped on, harvest the energy created before storing it in lithium polymer batteries. This can then be used to power localized applications such as street lighting, shop signs, or alarms."



In The Future, Your Clothes Will Be A Power Plant

fastcoexist



TidewaterCurrent "Your body is always generating heat, even when you are asleep. And heat, regardless of the source, excites electrons. The flow of electrons, in turn, generates electricity. The tricky part is harnessing enough electricity to power a small device. Wiant says TEGwear will do just that, as long as the chip is either touching your skin or separated from it by only a thin layer of clothing."

January 9, 2013



Tornado Power: Green Energy of the Future?

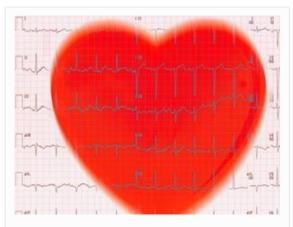
blogs.smithsonianmag



TidewaterCurrent 12.17.12 -

"Atmospheric Vortex Engine, introduces warm, humid air into a circular station where it assumes the form of a rising vortex. In other words, he creates a controlled tornado. The difference between the heated air and the atmosphere above it supports the vortex and drives turbines. Simply shutting out the source of warm air turns off the tornado."

December 18, 2012



Heartbeat 'could power pacemaker'

bbc.co.uk



TidewaterCurrent

November 24, 2012



Lucid Energy strikes deal with Portland to install in-pipe power system | Sustainable Business Oregon

sustainablebusinessoregon



TidewaterCurrent 12.18.12 - "the LucidPipe Power System will be installed in a section of large-diameter, gravity-fed water pipeline that's being installed as part of a system upgrade at Southeast Powell Boulevard and 147th Street in Portland. The system is expected to generate an average of 1,000 megawatt hours of energy per year from the water flowing through the pipe, enough electricity to power some 150 homes."

December 20, 2012





Can a Bike-Powered Blender Really Change the World?

treehugger



TidewaterCurrent 10.30.12 - Pedal powered devices water pumps, straw choppers and more.

November 26, 2012



Good Vibes Used To Power Rail Infrastructure «

earthtechling



TidewaterCurrent 11.22.12 - A mechanical motion rectifier, uses vibrations on tracks to power signal lights, crossings gates and more. November 22, 2012



Recycling Wasted Heat and Power Could Clear the Air - Forbes

forbes



TidewaterCurrent October 26, 2012



Waste Wattage: Cities Aim to Flush Heat Energy Out of Sewers

news.nationalgeographic



TidewaterCurrent Vancouver touts first big waste water recovery system -"In a sewage heat recovery system, a heat pump is used to capture the warmth of wastewater and transfer it to the clean water stream that is entering homes and businesses. It all operates as a closed-loop system, meaning that the dirty water never touches the clean water. But the warmth of the sewage water helps heat the water that is then used in showers, washing machines, dishwashers, or even in radiators to help heat buildings." December 11, 2012

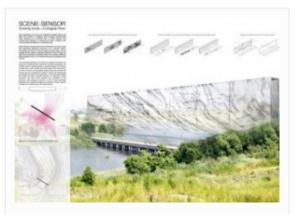


Prisoners Pedal Stationary Bikes To Generate Electricity -

revmodo



TidewaterCurrent August 14, 2012



Georgia Tech Student Teams Recognized at Land Art Generator Initiative Ideas Competition -Outcome Magazine

omglobe



TidewaterCurrent "Hundreds of entrants—professional and student design teams from around the world—submitted their designs for a site-specific public artwork that, in addition to its conceptual beauty, had to harness energy cleanly from nature and convert it to electricity for the utility grid." First place entry from the Georgia Tech School of Architecture, Scene Sensor, designed for the Staten Island Park is a wall of metallic mesh with piezoelectric wires that transform wind motion into electrical current.

November 24, 2012



Kinetic Sidewalk An Enlightening Feat At Olympics «

earthtechling



TidewaterCurrentJuly 17, 2012



The Otarky Rocking Chair is an Elegant Electricity-Generating Seat

inhabitat



TidewaterCurrentSeptember 13, 2012



In Eco Twist, Exercise Machines Power Gym - Earth911.com

earth911



TidewaterCurrent
July 26, 2012



CiclaLabs' Pedal-Powered Mobile Entertainment System On Show at the European Solar Decathlon

inhabitat



TidewaterCurrent "Utilizing the combined power of a couple of efficient photovoltaic panels and bicycles employed as dynamos, the Ciclalab team provided the crowds with music and entertainment all weekend. Both the panels and the bikes are connected to a 12v car battery, and via an inverter they create the required power to run the amplification, the instruments, the turntables and a film projector."



Why Sweden needs more trash | SmartPlanet

smartplanet



TidewaterCurrent "The country has a successful waste-to-energy program. It produces energy from 2 million tons of waste each year, heating 810,000 homes and providing electricity to 250,000 homes. The problem, however, is that Sweden's waste management system is so efficient that only four percent of household waste goes to landfills, the rest is reused and recycled. Typically this wouldn't be a problem except that Sweden doesn't have enough burnable trash for their waste-toenergy plants. So Sweden has turned to their neighbors for a surprising solution, Public Radio International reports:"

October 26, 2012



Sewage as energy: An essentially unlimited renewable resource

theglobeandmail



TidewaterCurrent 7.10.12 -Vancouver and Whistler Olympic Villages use sewage for heating and reduce GHG emissions. July 11, 2012



14-year-old generates electricity from raindrops | SmartPlanet

smartplanet



TidewaterCurrent 7.14.12 - Piezoelectric sheet of polyvinylidene fluoride used to collect energy from falling rain.

July 16, 2012



Minnesota Town to Tap into its Own Sewers for Geothermal Energy

inhabitat



TidewaterCurrent 7.13.12 - There's heat in our waste water that can be used displace energy needed for water and space heating.

July 14, 2012

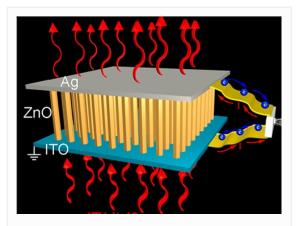


POO POWER: New Toilet System Turns Human Waste Into Electricity and Reduces Water Use By 90%

inhabitat



TidewaterCurrent 6.27.12 http://inhabitat.com/poo-power-newtoilet-system-turns-human-wasteinto-electricity-and-reduces-wateruse-by-90/ June 27, 2012



Ancient effect harnessed to produce electricity from waste heat

phys



TidewaterCurrent 6.13.12 - Wasted heat can be converted into electricity via the pyroelectric effect which was first described by a Greek philosopher. Nanogenerators could be developed to capture energy created through temperature fluctuations.

http://phys.org/news/2012-06-ancienteffect-harnessed-electricity.html June 13, 2012



Dirty Deeds Lead to Renewable Energy

designbuildsource.com.au



TidewaterCurrent May 14, 2012





Smart trains: Philly public transit line goes green with energy storage pilot

smartgridnews



TidewaterCurrent 6.28.12 - A regenerative breaking project with funding through the Pennsylvania Energy Development Authority is underway. The technology is being used in Philadelphia to capture wasted heat generated from breaking trains. The energy can be stored and fed directly to the grid when there is high demand.

http://www.smartgridnews.com/artma n/publish/Projects_Demo_Pilots/Sma rt-trains-Philly-public-transit-linegoes-green-with-energy-storage-pilot-4916.html

June 28, 2012



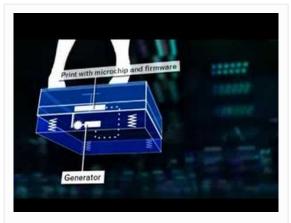
NY Farm Smells Like Victory For Biogas Technology «

earthtechling



TidewaterCurrent

May 10, 2012



Sustainable Dance Club (SDC) [VIDEO]

youtube



TidewaterCurrent

May 18, 2012



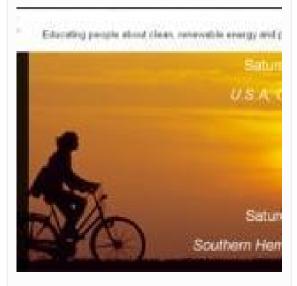
Energy recovery trial begins for diesel commuter trains

eandt.theiet



TidewaterCurrent 5.22.12 - Kinergy evaluation in the UK on the regenerative braking capability. http://eandt.theiet.org/news/2012/may/energy-trains.cfm
May 24, 2012





Pedal-Powered Lives & Businesses: 5 Top Stories

cleantechnica



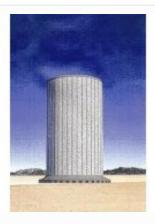
TidewaterCurrent 5.23.12 - Pedal powered lights, movie theaters, gyms and coffee roasters.

http://cleantechnica.com/2012/05/23/p edal-powered-lives-businesses-5-top-stories/?

utm_source=feedburner&utm_mediu m=feed&utm_campaign=Feed%3A+I M-

cleantechnica+%28CleanTechnica%2

May 23, 2012



Firm proposes first-of-kind electricity towers in San Luis

yumasun



TidewaterCurrent 5/6/12 - Maryland's Clean Wind Energy is planning the development of a new type of wind generator in Arizona. Hot dry air in the tower will be cooled with water from the Sea of Cortez, causing it to fall at speeds of 50 mph or more spinning turbines and creating electricity. The company expects the project to produce electricity for 1.6 million homes. The Project is on the agenda for San Luis City (AZ) Council next week.- Read more:

http://www.yumasun.com/articles/city-78831-towers-

san.html#ixzz1uBPsJUW4 and http://www.yumasun.com/news/tower s-78018-energy-city.html May 7, 2012



Viridity Captures Train Braking Power, Sells It to the Grid

greentechmedia



TidewaterCurrent April 27, 2012



Australian company turning pig power into biofuel

calgaryherald



TidewaterCurrent 5/2/12 http://www.calgaryherald.com/busines s/energyresources/6553041/story.html May 3, 2012



Anaerobic Digestion Gets Tech Upgrade «

earthtechling



TidewaterCurrent 5/3/12 - Putting waste to good use: Energy! Anaerobic system in use is converting tons of food, plant and yard waste as well as unrecyclable paper products into gas.

http://www.earthtechling.com/2012/05/ anaerobic-digestion-gets-techupgrade/ May 3, 2012