

Energy-Bio

by TidewaterCurrent

Energy from bio sources.

⊕ Part of Energy



Florida Innovates with Its Eucalyptus and Citrus for Biomass Production

renewableenergyworld



TidewaterCurrent 1.11.13 - EcoGen plans to produce energy at 3 plants from Eucalyptus trees and a company out of Delray Beach is piloting a citrus waste to ethanol plant.
January 14, 2013



OriginOil Ships Its First Production System

vimeo



TidewaterCurrent Fascinating Video on Origin Oil's Algae Model Appliance 4 which is integrated into a building's facade, either vertically along the wall or on the rooftop, and uses the building's wastewater to grow algae and create energy.
January 14, 2013



Shrub Willow Biofuel Heats Up New York Fracking Wars

cleantechnica



TidewaterCurrent "Despite the risks, many property owners find it difficult to resist the financial benefits of leasing or selling land over to fracking operations, especially in economically distressed areas (as dramatized in the forthcoming Matt Damon/Gus Van Sant movie Promised Land). The introduction of new income sources like shrub willow could help provide land owners with a more sustainable alternative."

December 26, 2012



U.S. Researchers Working to Commercialise Micro-Algae Biofuel

shipandbunker



TidewaterCurrent 1.10.13 - "The University of Southern Mississippi Department of Marine Science says it is taking part in an international study on the possibility of turning micro-algae into fuel....A report by the U.S. Maritime Administration (MARAD) in June found that algae-based biofuels could reduce emissions by 25 percent, but the RAND Corporation has said biofuels are likely to be unable to compete with petroleum products because of their high cost." January 15, 2013



Sacramento News & Review - Good digestions - Sustainability - Green - December 27, 2012

newsreview



TidewaterCurrent "Clean World Partners unveiled a new methane digester designed to convert organic waste into renewable natural gas. Starting this month, the facility will process 25 tons of food scraps per day and other garbage from Sacramento's restaurants, supermarkets and schools. By next year, the digester's capacity will quadruple, allowing Clean World to begin selling thousands of gallons of natural gas to local government and private vehicles."
January 17, 2013



Wind in the willows boosts biofuel production: Trees grown diagonally produce five times more biofuel

sciencedaily



TidewaterCurrent 1.18.13 - "Willow trees cultivated for 'green energy' can yield up to five times more biofuel if they grow diagonally, compared with those that are allowed to grow naturally up towards the sky."
January 19, 2013



Powered By Garden Waste: Groundbreaking Renewable Energy Technology

designbuildsource.com.au



TidewaterCurrent 11.30.12 - Western Australia - 35,000 tonnes a year of organic waste (garden, food, dairy, poultry etc.) will be converted to biofuel.

November 30, 2012



New Urban Algae System Generates Energy While Cleaning Wastewater in Paris

inhabitat



TidewaterCurrent 12.9.12 - Flat paneled algae harvesters have been placed on a buildings exterior in a pilot project to grow algae from building wastewater and then harvest the algae to power the building.

December 9, 2012



USVI utilizing grass to create renewable energy

fierceenergy



TidewaterCurrent 12.21.12 - US Virgin Islands plans to harvest fast growing non GE and noninvasive Giant King Grass for a 6 MW anaerobic power plant.

December 21, 2012



Company eyes hemp as feedstock for biofuel, power generation

biomassmagazine



TidewaterCurrent 12.14.12 - "Although federal rules currently prohibit the growth of hemp in the U.S., Patriot Bioenergy Corp. sees value in industrial hemp for biomass blending with bituminous coal for power generation as well as a possible cellulosic feedstock for biofuels."
December 16, 2012



German Pellets sets up new plant in Texas

renewablesinternational



TidewaterCurrent 12.5.12 - "The plant in Woodville will have a capacity of 578,000 metric tons of pellets each year, making it one of the largest in the world. The German firm says that the forests in the southeastern United States produce timber three times faster than German forests, which is quite an achievement considering that Germany already produces the most timber of any country in the EU."
December 13, 2012



Drive On: Algae-based diesel biofuel goes on sale

usatoday



TidewaterCurrent 11.14.12 - 20% algae diesel blend on sale in San Francisco.
November 14, 2012



Powering Up with Centralized Biodigesters for Dairy Farms

renewableenergyworld



TidewaterCurrent The California Energy Commission is looking turn cow manure into energy. "It is technically feasible to produce about 150 megawatts of generation (enough to power about 70,000 homes) from manure through the use of biodigesters, according to a study from the California Biomass Collaborative. The California Air Resources Board further estimates that the potential for methane capture from dairies amounts to about 3.1 million metric tons of carbon dioxide." December 10, 2012



Killington Resort Gondola Now Powered by Cow Manure

treehugger



TidewaterCurrent Green Mountain Power collects manure from 10,000 cows in Vermont and converts it to biogas. November 14, 2012



First biomethane-to-grid facility heating 56,000 homes in Dorset

ecoseed



TidewaterCurrent "Anaerobic digestion offers an environmentally sensitive waste disposal option for farmers and the food processing industry, diverting organic waste from landfills. In the case of Rainbarrow, the digester will use 24,000 metric tons of maize, 10,000 metric tons of grass, 4,000 metric tons of potato waste and a small amount of waste chocolate and muesli." November 29, 2012



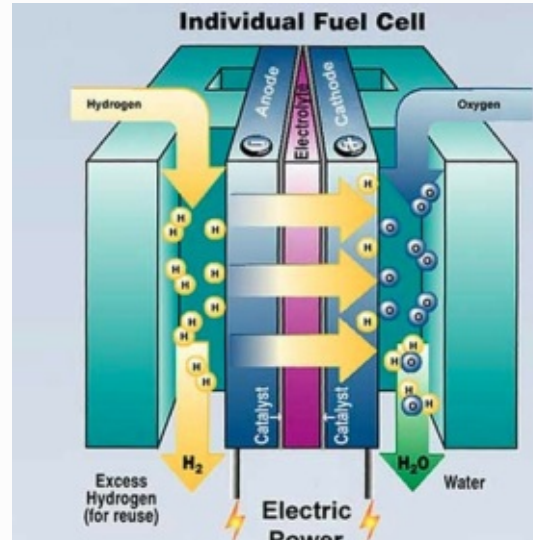
High Fuel Costs Spark Increased Use of Wood for Heating, According to Winter Fuels Outlook

news.nationalgeographic



TidewaterCurrent "many American households are returning to the nation's original heating fuel—often in modern energy-saving pellet stoves—that the U.S. government's energy forecasters this month for the first time ever included an analysis of firewood and pellets in the annual Winter Fuels Outlook."

October 22, 2012



Microsoft building clean powered data center at waste water plant

gigaom



TidewaterCurrent 11.19.12 - "Microsoft has unveiled details of an experimental small data center that it's building next to a waste water treatment plant in Cheyenne, Wyoming. The tiny data center will be powered by a fuel cell that uses biogas from the water facility"
November 21, 2012

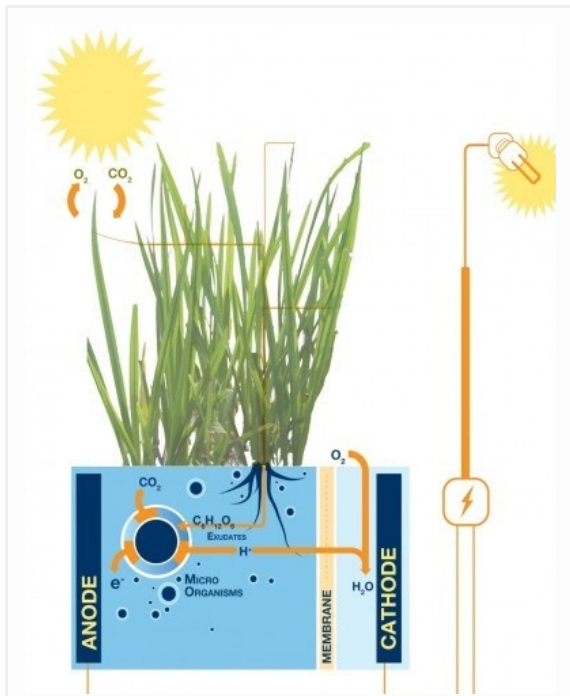


All the Trimmings: Jenbacher Engine Powers University with Biomass – ecomagination

ecomagination



TidewaterCurrent 9.10.12 - Wood chips and tree trimmings to help heat University of British Columbia.
September 18, 2012



Plant-Microbial Fuel Cell generates electricity from living plants

gizmag



TidewaterCurrent 11.25.12 - Plant-Microbial Fuel Cell technology developed at Wageningen University & Research in The Netherlands does not utilize a fermentation process to create energy but instead taps energy emitted by living plant roots. The team has demonstrated the process.
November 26, 2012

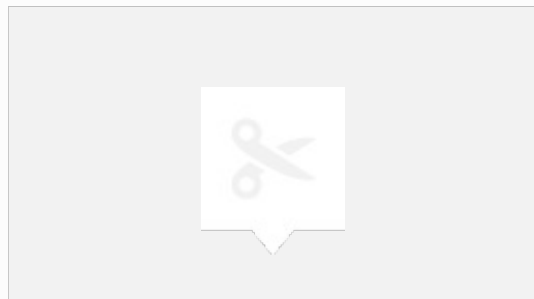


Bio-Power Shows Competitive Edge

renewableenergyworld



TidewaterCurrent
October 3, 2012



City plans biogas renewable energy project

waterworld



TidewaterCurrent 9.13.12 - Wilmington, DE will capture methane from their wastewater treatment plant and the Cherry Island landfill to produce 4 MW of energy or roughly 90% of the treatment plants energy requirements.
September 13, 2012



The Pine Beetle Problem: Making Renewable Energy Lemonade from Biomass Lemons

renewableenergyworld



TidewaterCurrent 10.12.12 - Fast pyrolysis of trees killed by the Pine Beetle infestation could create fuel and remove a fire hazard.

October 14, 2012



Columbia Falls biorefinery plant hosting open house | KPAX.com | Missoula, Montana

kpax



TidewaterCurrent 8.22.12 - Sited by a lumber mill, the Algae AquaCulture Technology Greenhouse, sequesters carbon from the facility and produces low-carbon fuel, clean water, nutrient-dense soil, and vibrant, nutritious food. Check out the company's facebook page.

August 23, 2012



Scientists Developing Wood-Powered Batteries Made From Paper Waste!

inhabitat



TidewaterCurrent

August 15, 2012



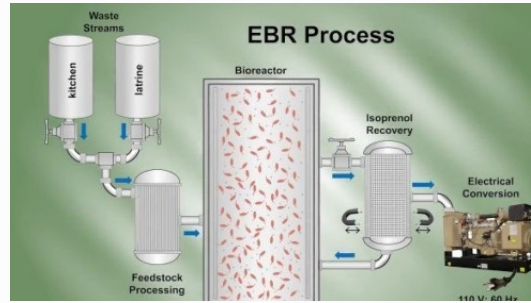
Anaergia Generates Renewable Energy from Organic Waste with the First Power Purchase Agreement using Fuel Cells in California for the City of San José

waterworld



TidewaterCurrent 9.27.12 - "1.4MW renewable energy plant at the City of San José Water Pollution Control Plant in California is coming online using biogas from the anaerobic digesters.... All heat and electricity produced by the facility is used at the Water Pollution Control Plant to reduce natural gas and electricity consumption, the amount of energy generated is enough to offset the annual consumption of 1,400 households."

September 29, 2012



Mobile machine can make biofuel for military and humanitarian operations

gizmag



TidewaterCurrent The Endurance Bioenergy Reactor developed at DoE's Argonne National Laboratory can produce energy on location using kitchen and latrine waste.

August 21, 2012



Brewing Biogas in Bitburg

designbuildsource.com.au



TidewaterCurrent 8.22.12 - 193 year old german brewery uses GE combined heat and power technology to sustainably brew beer. By using the new system which burns biogas created from the facility's wastewater, energy use and carbon emissions have been reduced.

August 22, 2012

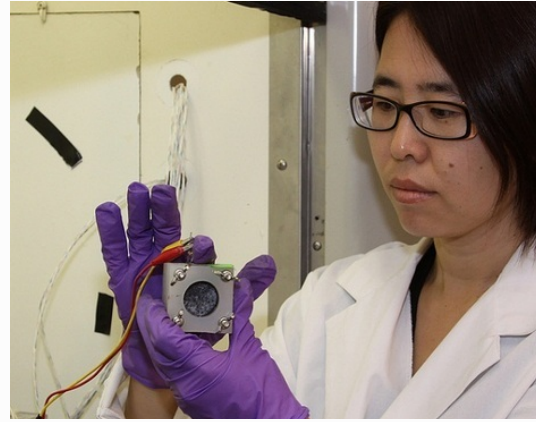


Bill Gates Backs Solar Powered, Hydrogen Fuel Cell-Equipped Toilet

treehugger



TidewaterCurrent 8.15.12 - Caltech won first place in the Gates Foundation Reinvent the Toilet Fair. They developed a working model of a solar powered toilet that turns human waste into energy.
August 15, 2012



Scientists: Wastewater Can Be An Energy Superstar «

earthtechling



TidewaterCurrent 8.14.12 - 3% of electricity goes toward treating wastewater. With microbial fuel cell technology being developed at Oregon State scientists, sewage treatment plants will be able to produce all their own energy and more. According to the author, this technology could be a real game changer. See more in Energy-Bio and Energy-out of the box.
August 15, 2012



Cities will convert 260 million tons of waste to energy | SmartPlanet

smartplanet



TidewaterCurrent 7.26.12 - With the largest per capita energy consumption and waste production, it certainly seems like a good idea in the US. The waste stream will be reduced. Biomass in the waste stream may limit the contribution to GHG emissions. but other emissions could be a concern.
August 12, 2012



Tax credits awarded for Wastewater treatment and renewable energy plant - JSOnline

jsonline



TidewaterCurrent 7.23.12 - Wisconsin farming operators are developing a facility to treat wastewater. Through anaerobic digestion at the plant, renewable energy will be generated.
July 24, 2012



US Biomass: Where Do All the Wood Pellets Go?

renewableenergyworld



TidewaterCurrent 6.14.12 - Burning sustainable sourced wood pellets from the SE US in Europe less expensive than coal, because there's no carbon tax.
July 19, 2012



U.S.'s largest biomass facility converting wood waste to power in Texas

ecoseed



TidewaterCurrent 7.19.12 - 100 MW facility fed wood mill waste can provide power to 60,000 homes.
July 19, 2012



The missing link to a \$7 billion market | SmartPlanet

smartplanet



TidewaterCurrent 7.25.12 - Demand for wood pellets is high in Europe, it's a market the US can supply (whether we should is another question).
July 25, 2012



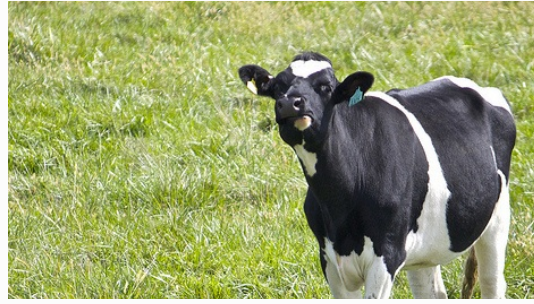
Denver Zoo Elephant Passage (Powered by Poo) Takes LEED «

earthtechling



TidewaterCurrent 6.20.12 - Biomass gasification system converts elephant poo and 90% of zoo waste into energy that powers the elephant exhibit (reducing annual landfill contributions by 1.5 million pounds annually). Most of the water in the exhibit is also recycled for use in other exhibits and irrigation.

<http://www.earthtechling.com/2012/06/denver-zoo-elephant-passage-powered-by-poo-takes-leed/>
July 19, 2012



Cow Power in Action: 920,000 kWh of Electricity and Happier Cows

cleantechnica



TidewaterCurrent 7.19.12 - The USDA through it's Rural Energy for America Program is helping livestock operators collect and anaerobically digest manure to produce biogas. The biogas produced at Pennwood Farm in Pennsylvania provides more electricity than needed generating income from the sale of the extra electricity and leftovers from the digestion process can be used for bedding saving the farmer \$60,000 per year. This is a win win program as the cow manure will never make into our waterways.

July 20, 2012



NY Farm Smells Like Victory For Biogas Technology «

earthtechling



TidewaterCurrent
July 19, 2012



Australian company turning pig power into biofuel

calgaryherald



TidewaterCurrent 5/2/12 - <http://www.calgaryherald.com/business/energy-resources/6553041/story.html>
July 19, 2012

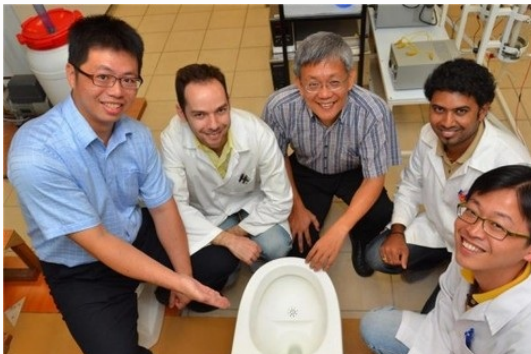


Anaerobic Digestion Gets Tech Upgrade «

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-tech-upgrade/>
July 19, 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-new-toilet-system-turns-human-waste-into-electricity-and-reduces-water-use-by-90/>
July 19, 2012