



Green Technology

Resources for Community Facilitators

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Meeting the needs of the present without compromising the ability
of future generations to meet their needs.

Instructions for Green Technology Bulletin Board Assembly

- Ideally, the images and captions pertaining to transportation should go with the text pertaining to transportation, architecture, etc.
- Cut out individual pieces of text and put them against a colored background for best results

Spotlight On: Transportation

What's a Greasecar?

A "greasecar" is a car or truck previously run on diesel (think Mercedes circa 1980s) converted to run on vegetable oil (like the stuff your In-N-Out Burger is cooked in). They perform just as well as normal, gasoline-powered cars.

College student Justin Carven first began experimenting with vegetable oil-powered motors in 1998, and by 2004 had a steady business selling diesel-to-vegetable oil converter kits and grease filtration systems.

Greasecar drivers can pick up an old diesel-powered car, a do-it-yourself converter kit, a grease filtration system, and a steady source of vegetable oil (often offered for free by local restaurants that use fryolators)

Driving a vegetable oil-powered vehicle eliminates carcinogenic sulfur emissions (SO_x), and is classified as carbon neutral, making it a great solution to reduce the impacts on human and environmental health done by driving a normal vehicle.

Spotlight On: Energy

How Can Wind Heat Us
Up in the Winter?

Wind energy, harnessed by turbines, is one of the cleanest and most efficient methods of generating electricity.

A typical wind turbine
(10 kilowatts) in average wind
conditions can generate about
10,000 kilowatt hours of
electricity annually.
This is enough to supply the
typical household with its
yearly electricity needs.

Wind turbines can be built on
land or offshore.

Why so Controversial?

Critics of wind energy say the spinning rotors are a hazard to migratory birds, not to mention their unsightliness. In offshore wind fields, some say the turbines pose a threat to the fishing industry as well.

Spotlight On: Architecture

Natural Insulation

Straw bales function well as natural insulation in the walls of sustainable buildings.

Typically, after a grain harvest, straw is burned as a waste product, a process which contributes to the problem of high CO_2 emissions. Recycling it and reusing it as insulation, however, reduces emissions and

cuts down on the use of harmful, synthetic insulation.

Insulating a building with straw instead of fiberglass insulation produced from fossil fuels could save up to 75% in heating and cooling costs every year.

Want to find out for yourself?
Spend some time in Kennedy
Commons, which uses straw bale
and denim insulation.



A diagram of the parts to a wind turbine



Greasecar founder Justin Carven standing next to a 1980s Volkswagen modified to run on vegetable oil



An example of an offshore "wind farm"





Kennedy Commons, a sustainable building partially insulated with straw bales



Examples of synthetic insulation which are known to be harmful to human health and the environment



Walls in Kennedy Commons insulated with staw bales, as seen during construction

Transportation

<http://www.greasecar.com/>

http://www.pvlocalfirst.org/files/imagecache/business/files/businesses/greasecar_logo.gif

(image)

<http://www2.grist.org/images/news/maindish/2006/12/11/Justin-Carven.jpg> (image)

Energy

<http://www.awea.org/>

<http://www.capewind.org/>

<http://www.unpluggedliving.com/wp-content/uploads/2007/12/turbines-water.jpg> (image)

<http://www.alternative-energy-news.info/images/technical/wind-turbine.jpg> (image)

Architecture

<http://www.buildingwithawareness.com/house7.html>

<http://www.scu.edu/sustainability/commons/tour.cfm>

<http://www.epsea.org/straw.html>

Photos courtesy of L. Cromwell, Office of Sustainability