GET OFF THE GRID - ECO-HOUSING IS HERE!

From sustainable materials like flyash concrete, FSC-certified wood, no-VOC paint and EcoResin to the green roof, LED lighting system, EnergyStar appliances, photovoltaic energy system, and rainwater/greywater catchment, this house is as green as it gets. The ‘zero-energy’ house actually produces so much energy from the solar panels on the roof that you can charge your electric vehicle with a plug in the side of the house.

This is the grey water filtration system in front of the house - look closely and you can see architect Michelle Kaufman in the window. The green roof surrounds skylights.

See more cool eco-architecture at: www.inhabitat.com/category/architecture

... and They Deliver!

The benefits of green homes are catching on! Entire apartment communities are getting solar-powered, and now PowerHouse Enterprises is making solar power more accessible with green prefab homes delivered by truck! Three of their award-winning designs - single family, multi-unit, and PowerPod - offer flexible living solutions with features such as energy-generating metal roofs, solar electricity, low-flow composting toilets, CFLs for lighting, bamboo flooring, and recycled compost wood siding.
PREFAB FRIDAY: Solar Green Homes Delivered by Truck!

by Mahesh Basantani

Elevation of PowerPod with “Butterfly Roof”

The houses are factory built in the US and currently are delivered in pieces by truck to states in New England and to New York. Their concrete foundations are pre-poured, and space is left for lighting, plumbing, and wiring to be completed on site.

One highlight is the metal roofing, which serves dual purposes. It provides heating during cold seasons and generates electricity. Water runs in plastic tubes installed under the roofs and is heated by the sun, which supplies hot water and heats the homes. Also, roof-integrated solar photovoltaic (PV) panels generate a portion of the homes’ electricity needs.

The multi-units range from affordable housing to high-end urban condominiums. The PowerPods could be used as energy-efficient guest houses, vacation homes, offices, studios, or even house boats, and come with a choice of roof variations. The “solar butterfly” roof design collects rainwater, maximizes the use of daylight, and is fitted with solar PV panels to generate electricity - all for about $100,000!
Multi-unit Elevation & Floor Plan

Elevations of PowerPod Houses Show Roof Variations

DRAWING & DISCUSSION:
On a blank paper, on the board, or using Computer Assisted Drafting at the computer, draft your perfect eco-house and label 10 features you include. Your drawing can be the home of your future family, business or some other building.

When done, show your drawing to the class and explain your 3 best features and why you included them.