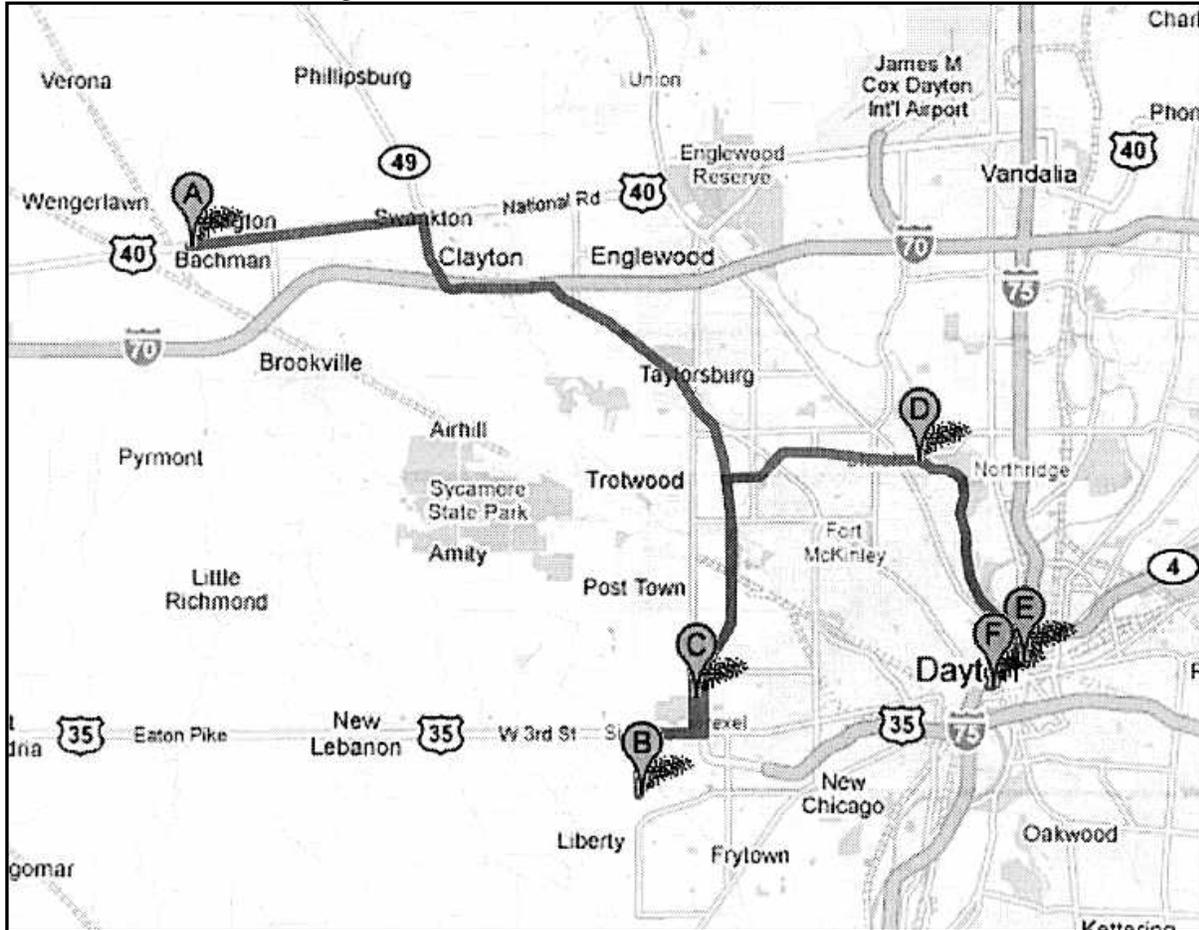




www.GreenEnergyOhio.org



2008 Dayton Solar Tour Guidebook



SITES

- A. Dull Farm Homestead
- B. Perone Residence
- C. Madison Lakes
- D. Girl Scout Urban Campus
- E. Lighthouse Demonstration House
- F. Sinclair Center for Energy Education Laboratory

	A	B	C	D	E	F
Solar Electric			•			•
Wind	•	•	•			•
Solar Thermal						•
BioMass/Diesel	•					•
Geothermal				•	•	
Vegetative Roof				•		
Other	•				•	•

OVERVIEW

The Dayton Tour commences with a 9:00 AM kick-off and guided tour at the Dull Farm Homestead and the Future Energy Center onsite. Please brownbag your lunch. For questions call: 937-689-3712 or send an email to pohlarlp@woh.rr.com. Carpooling is encouraged. Cars will loosely caravan through the tour sites and end at the new Sinclair Community College Renewable Energy Lab. Each attendee will receive a current copy of the GEO News and Dayton Tour Guidebook containing descriptions of all the local tour sites and most of the solar tour sites throughout the state.

Green Energy Ohio (GEO) is a statewide nonprofit organization dedicated to promoting economically & environmentally sustainable energy policies & practices in Ohio. The Ohio Solar Tour is organized by GEO as part of the American Solar Energy Society's National Solar Tour.

A. Dull Farm Homestead

10404 National Rd.
Brookville, Ohio 45309

Hours: Saturday, October 4th

Kick-off & Guided Tour: 9:00 – 10:15 AM

Site Information: The Dull Homestead is a model of modern agriculture and much has been done there in the name of efficiency, stewardship of the land and technology. In May 2004, the Dull's installed 6 Bergey Excel-S 10kW wind generators. The turbines are placed in a row running north & south to capture the predominant west winds. The generators are mounted on 120ft tall towers. The output is processed by battery-free inverters and fed into the farm's single phase 208 volt power system. The environmental and economic impact of this project is quantifiable through monitoring the clean power produced by the system. Renewable energy is not the first of the Dull Farms moves toward sustainable practices. They have successfully designed and constructed an on-site biomass fired seed drying process, eliminating 50,000 gallons of propane previously used for this energy intensive processing. The Dull farm is also home of the Future Energy and Conservation Center in partnership with the Dayton Peace Museum, where visitors are welcome to learn more about all aspects of sustainable energy practices.

Directions to Kick-off Event from I-70/I-75 Intersection: Drive along I-70 W toward Indianapolis --go 13.3 mi -- Take exit 21 - Brookville/Co Rd 533 -- Turn right at exit onto Arlington Rd-go 0.2 mi -- Turn left at National Rd--go 1.5 mi to 10404 National Rd Brookville, OH 45309 -- Enter driveway at Future Energy and Conservation Center sign - Total driving time from I-70/I-75 intersection is 18 min.

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B. Perone Residence

1056 S. Union Rd.
Dayton, Ohio

Hours: Saturday, October 4th

Guided Tour: 10:15 AM – 11:45 PM

Site Information: The Frank Perone residence sits high on a hilltop overlooking the surrounding farmland. From the front yard you can see for seven miles on a clear day. This is a perfect location for his Skystream 3.7 wind turbine mounted atop a 33 ft. monopole. Installed in 2008 by Powerflo LLC, the turbine is rated at 1.8 kW and 2.4 kW peak, and is tied to the grid. Along with abundant fruit trees and vegetable gardens, the wind turbine fits nicely into their family goal of being as self-sufficient as possible.

Directions: Head east on National Rd to Arlington Rd (return to I-70E) --Turn right -- go to I-70 interchange and enter onto I-70E toward Dayton -- Exit at Hwy 49S toward Trotwood -- Merge onto Hwy 49S/Salem Ave -- Turn right at the Hwy 49/Trotwood Connector -- Turn right at W. 3rd St Turn left at S. Union Rd -- Proceed to 1056 S. Union Rd -- Drive Time - 25 min.

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C. Madison Lakes
581 Olive Rd.
Dayton, Ohio 45427

Hours: Saturday, October 4th
Guided Tour: 11:45 PM– 12:45 PM

Site Information: Montgomery County’s Madison Lakes Park features over 200 acres of forest, prairies and wetlands, including three interconnecting spring-fed quarry lakes. The park is also home to the Montgomery County-Renewable Energy Demonstration Center, which features working installations of wind and solar energy. The grid-tied solar electric system consists of thin film PV panels (2.5 kW peak rating) installed on the existing standing-seam metal roof of the conference center. The grid-tied wind electric system consists of a 10 kW peak rated wind turbine mounted on a 90 foot monopole tower. Future plans for the conference center at the park include energy-efficiency measures such as lighting retrofits and a lake coupled geothermal heating and cooling system.

Directions: Head north on S. Union Rd – Turn Right on W. 3rd Street -- Turn left onto Olive Rd (just before you return to Hwy 49) – Proceed to 581 Olive Rd on left -- Drive Time - 3 min.

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D. Girl Scout Urban Campus
450 Shoup Mill Rd
Dayton, Ohio 45415

Hours: Saturday, October 4th
Guided Tour: 12:45 PM – 2:00 PM

Site Information: The Girl Scouts of Buckeye Trails Council, collaborating with the architectural firm of Lorenz Williams, used sustainable design principles to create an environmentally friendly resource center for girls to benefit from experiential indoor and outdoor learning as well as regional office space for staff. Energy conservation is achieved with high performance roof and wall systems, natural day-lighting with sunshades, a geothermal HVAC system, natural ventilation and a vegetated roof. Construction impacts were minimized through clever utilization of existing landscape and choice of materials scouring. Building materials contain substantial amounts of recycled products. Trees harvested from the site were reused for wood trim within the building. Cork flooring is used in corridors and efficiently made carpet tiles in rooms. The permeable parking lot and vegetative roof minimize storm water runoff into an on-site creek that feeds into the Stillwater River.

Directions: Head south on Olive Rd – Turn left on W. 3rd St -- Turn left onto Hwy 49N – Turn right on Turner Rd which will become Shoup Mill Rd at Main St. Proceed east on Shoup Mill rd to 450 Shoup Mill Rd.

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Litehouse Demonstration House
Corner of 1st & Patterson St
Dayton, Ohio

Hours: Saturday, October 4th
Drive By: 2:00 PM – 3:00 PM

Site Information: The Litehouse Demonstration Home is the first in a series of homes located in downtown Dayton built to a wide variety of green building standards, including use of green materials, design and construction methods. This house has high insulation levels, energy-efficient appliances and passive solar day-lighting. Future plans include the addition of solar PV and thermal systems and plans for these additions will be discussed.

Directions: Head east on Shoup Mill Rd -- go 0.2 mi -- Turn right at Riverside Dr -- go 4.2 mi --

Turn right at E Monument Ave -- Turn left at St Claire St -- Turn left at 3rd St next to the library—Turn left on Patterson – Building is located on the west side of Patterson Rd between 1st and 2nd street. -- Drive Time - 12 min.

F. Sinclair Community College Center for Energy Education Laboratory

444 W 3rd St, Bldg 11, Rm 126
Dayton, Ohio 45402

Hours: Saturday, October 4th
Guided Tour: 3:00 PM – 5:00 PM

Site Information: The Sinclair Community College Center for Energy Education Laboratory has just taken possession of the hardware needed to install a PV electric, solar thermal and wind turbine systems as part of this unique lab for Sinclair students in the Dayton area. All systems will be fully operational by the date of this tour. This lab also includes bio-diesel and ethanol generators. The presence of this lab in the Dayton area will provide a tremendous resource to expand the knowledge and capacity of the Dayton area to take advantage of renewable energy solutions right here close to home. Tour attendees at this site should be able to visit a wide variety of systems as well as receive excellent information as to how the systems work and what the installation and performance issues are with each type of system.

Directions: Head south on N Patterson Blvd toward E 2nd St -- go 0.1 mi -- Turn right at E 2nd St -- go 0.1 mi -- Turn left at N St Clair St -- go 0.1 mi -- Turn right at E 3rd St -- go 0.6 mi – Parking is available at the Sinclair Parking Garage, Montgomery County Parking Garage or on the street. Check the web site or attend the kickoff site for an update to these directions to include detailed walking directions directly to the lab. Drive Time - 5 min.