2010 Michiana Solar Tour & Sustainability Fair

ASES National Solar Tour
www.NationalSolarTour.org

www.HomeEnergyLLC.com/michianasolartour.html

Saturday, October 2, 10:00 am - 2:30 pm

Michiana Solar Tour is a self-guided tour of sites using renewable energy like solar and other green practices. Learn from people who live green methods to conserve our natural resources in real, applicable ways. Start anywhere at your convenience and choose which sites to visit. Don't forget to register at each location that you visit for your chance to win a gift from local tour sponsors Home Energy, LLC and Inovateus Solar!

Please join us for the Sustainability Fair at Rieth Interpretive Center, 421 W. Plymouth Ave., Goshen, from 10:00 am to 2:30 pm to learn more about sustainable living through education and demonstration. Mayor Allan Kauffman of the City of Goshen will be there to open the event. Solar Basics presentations will be held at 10:15 am and at 1:15 pm with solar expert Leon Bontrager. These will be brief and will present basic solar energy information, such as how solar can be utilized in your home or business, and will answer some frequently asked questions. Then join us at 2514 S. Main Street for a guided walk-thru of a system; refreshments will be served and solar professionals will be available to answer your questions.

Google Map available at www.HomeEnergyLLC.com/michianasolartour.html

1 Rieth Interpretive Center
421 W. Plymouth Ave.
Goshen, IN 46526

2 Gascho Residence
2514 S. Main St.
Goshen, IN 46526

3 Hess Residence
506 Carter Road
Goshen, IN 46526

4 Shantz Residence
60728 County Rd-27
Goshen, IN 46528

5 Reser Residence
19410 Dorchester Court
Bristol, IN 46507

6 Wolfgang Residence
65364 Dailey Road
Edwardsburg, MI 49112

7 First Federal Savings Bank
906 W. Edison Road
Mishawaka, IN 46545

8 McCormick Motors
1255 W Market St.
Nappanee, IN 46550

9 Levinson Residence
7041 E Eli Lilly Rd
Syracuse, IN 46567

10 Bowman Residence
12772 CR 44
Millersburg, IN 46543

11 Buschert Residence
216 Gra-Roy Drive
Goshen, IN 46526

12 Prowse Residence
10390 E. 700 S.
Wolcottville, IN 46795

13 Kelly Residence
23725 CR 38
Goshen, IN 46528

14 Chupp Residence
30560 CR 146
Nappanee, IN 46550

The ASES National Solar Tour is the world's largest grass roots solar event. This event offers participants the opportunity to tour homes and buildings to see how neighbors are using solar energy, energy efficiency, and other sustainable technologies to reduce their monthly utility bills and help tackle climate change.

In addition to highlighting solar options available, an increasing focus of the tour is on energy-saving techniques and sustainability through building design, energy efficient appliances, and use of green materials during remodeling. Tours also provide helpful, real-world examples of costs and how to save money with federal, state, and local incentives.

1 Rieth Interpretive Center

421 W Plymouth Avenue, Goshen, Indiana

From north, downtown Goshen (about 1 mi from downtown):
- Go south on SR 15 / S Main St
- Turn right onto W Plymouth Ave / SR 119, building is on the left

From south of Goshen (about 2 mi after Kercher Rd. / CR 38):
- Go north on SR 15 / S Main St
- Turn left onto W Plymouth Ave / SR 119, building is on the left

2 Gascho Residence

2514 S Main Street, Goshen, Indiana

From north, downtown Goshen (about 2 mi from downtown):
- Go south on SR 15 / S Main St
- Turn left on CR 38 / E Kercher Rd, house is on the left

From south of Goshen:
- Go north on SR 15 / S. Main Street
- Turn right on CR 38 / E Kercher Rd, house is on the left

3 Hess Residence

506 Carter Road, Goshen, Indiana

From north, downtown Goshen (about 2 mi from downtown):
- Go south on SR 15 / S. Main Street
- Turn right at the 2nd Carter Road entrance, house is on the left

4 Shantz Residence

60728 County Road 27, Goshen, Indiana

From SR 15 (about 2.5 mi north of downtown Goshen):
- Turn east (right) on CR 126 (1.3 mi)
- Right on CR 27, house is on the right

5 Reser Residence

19410 Dorchester Court, Bristol, Indiana

From US 20 (about .5 mi west of SR 15):
- Turn north onto CR 23 (.5 mi)
- Left onto CR 16 (.5 mi)
- Right onto Whispering Hill Drive (.5 mi)
- Left onto Dorchester Court (2nd road), house is on the left in cul-de-sac

6 Wolfgang Residence

65364 Dailey Road, Edwardsburg, Michigan

From US 12 in Michigan (Main Street in Edwardsburg):
- Turn north onto Dailey Road / Cass Street (5.3 mi)

7 First Federal Savings Bank

906 W. Edison Road, Mishawaka, Indiana

From Mishawaka, US 20 W (bypass):
- Turn north at Bremen Hwy (1.3 mi), continue on Union St. (.8 mi), continue on Church St. (.6 mi)
- Slight right at N Main St. (2.2 mi)
- Turn left at W Edison Road (.6 mi)

From South Bend, SR 933 / US 31 / Michigan St:
- Go east on E Angela Blvd (.7 mi), continue on Edison Road (2.3 mi)

8 McCormick Motors

1255 W Market Street, Nappanee, Indiana

From east, downtown Nappanee (N Main St / SR 19):
- Go west on W Market St / US 6 (1 mi), dealership is on the left

From west, SR 331 / Bremen Hwy:
- Go east on US 6 (8 mi), dealership is on the right

9 Levinson Residence - The Low Carbon Lakehouse

7041 E Eli Lilly Road, Syracuse, Indiana

From downtown Syracuse:
- Go south on N Huntington St / N SR 13 (.5 mi)
- Turn left at E Pickwick Dr (.6 mi), continue on E Pickwick Rd (1.4 mi)
- Turn right at CR 675 E / N Warner Rd (.1 mi), continue on E Eli Lilly Rd (.3 mi), house is on the right

10 Bowman Residence

12772 CR 44, Millersburg, Indiana

From west, US 33 (about 5.5 mi north of US 6):
- Go east on CR 44 (3 mi), house is on the right

11 Buschert Residence

216 Gra-Roy Drive, Goshen, Indiana

From north, downtown Goshen (1.5 mi):
- Go south on SR 15 / S Main St (1.2 mi)
- Turn right onto Gra-Roy

12 Prowse Residence

10390 E 700 S, Wolcottville, Indiana

From west, south Milford (3.0 mi):
- Go north on IN 3 (0.6 mi)
- Turn right onto E 700 S (2.4 mi)

New to Solar? See the back cover for a helpful glossary of terms!

13 Kelly Residence

23725 CR 38, Goshen, Indiana

From east, downtown Goshen (about 5.5 mi):
- Go south on SR 15 / S Main St (0.5 mi)
- Turn right onto W Plymouth Ave / SR 119 (4.7 mi)
- Turn right onto CR 38 (0.4)

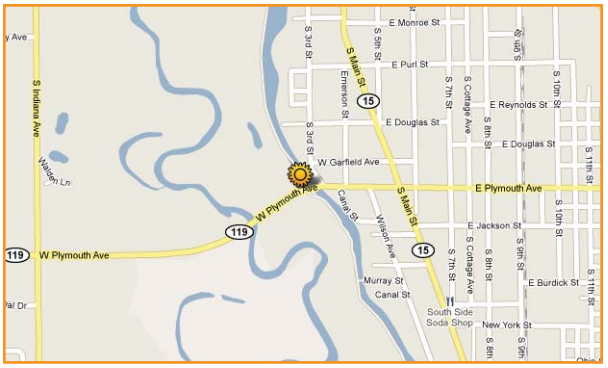
14 Chupp Residence

30560 CR 146, Nappanee, Indiana

From east, IN 19 (3.5 mi north of US 6):
- Go west on CR 46 (1.2 mi)
- Turn left onto CR 146(1.7 mi), house is on the left

1 Rieth Interpretive Center

421 W Plymouth Ave, Goshen, Indiana



Sustainability Fair

Join us at the Rieth Interpretive Center from 10:00 am to 2:30 pm to learn more about sustainable living through education and demonstration. Come see creative solutions and practices in a wide range of sustainable living topics such as renewable energy, sustainability foods, green building, recycling and more. Mayor Allan Kauffman of the City of Goshen will be there to open the event. Solar Basics presentations will be held at 10:15 am and 1:15 pm with solar expert, Leon Bontrager. These will be brief and will present basic solar energy information, such as how solar can be utilized in your home and business, and will answer some frequently asked questions.

Don't miss the short Solar Basics presentations at 10:15 am and at 1:15 pm with solar expert Leon Bontrager!

Participating Exhibitors

Air Tite Insulation, Inc.
(574) 825-5271
www.AirTite-Insulation.com

Anco Products, Inc.
(574) 293-5574
www.AncoProductsInc.com

BAEC Green Building Council
(574) 293-0997
www.ba-ec.com

Building Systems by richard miller construction, inc.
(574) 533-8357

Chain Reaction Bicycle Project
(574) 903-3056
www.crbp.org

Clay Bottom Farms
(574) 642-4123
www.ClayBottomFarm.com

DJ Construction Company, Inc.
(574) 533-1645
www.DJConstruction.com

Elkhart County Soil and Water
(574) 533-3630
www.elkcoswcd.org

Everett Metzler
(574) 534-5491
margever@gmail.com

First Federal Savings Bank
(574) 524-8989
www.FirstFederalBanking.com

Friends of the Pumpkinvine
www.Pumpkinvine.org

Goshen Farmer's Market
(574) 533-4747
www.GoshenFarmersMarket.org

Habitat Re-Store
(574) 533-1823
www.habitatec.com

Home Energy, LLC
(574) 825-4800
www.HomeEnergyLLC.com

Inovateus Solar
(877) 876-SOLAR
www.InovateusSolar.com

Interface Architecture & Design, LLC
(574) 875-9431
www.InterfaceArch.com

LaCasa, Inc.
(574) 533-4450
www.LaCasaGoshen.org

Lead Poisoning Prevention Program by Elkhart County Health Department
(574) 523-2283
www.elkhartcountyhealth.org

NuVale Products, LLC
(574) 970-0313
www.NuValeProducts.com

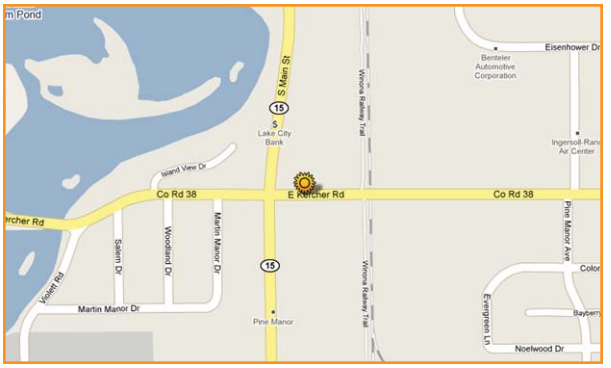
88.1 WVPE
(574) 262-5660
www.WVPE.org

Yoder's Custom Builders
(269) 663-8856
www.YoderCustomBuilder.com

Sustainability Fair offers interactive, family oriented exhibits designed to educate people of all ages and backgrounds about: renewable energy, green building, sustainability foods, recycling and more!

2 Gascho Residence

2514 S Main Street, Goshen, Indiana



5 kW Grid-Tied Solar Electric System

This couple had a 5.25 kW grid-tied solar electric system installed to help compliment other energy efficiency measures.

System Components

- 24 Schott 220 Watt solar modules; two rows of 12
- Sunny Boy 6000 US Inverter

System Designer
Home Energy, LLC

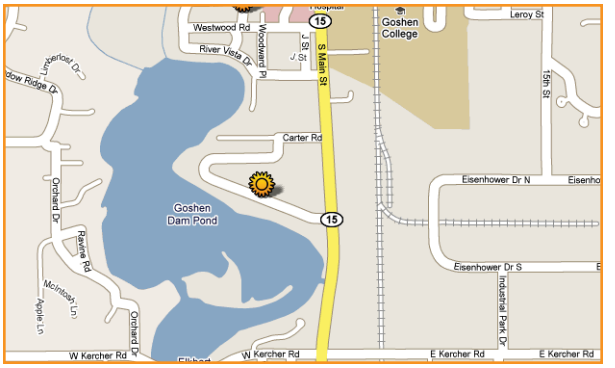
System Installer
Home Energy, LLC

Date of System Completion
May 2010

DON'T MISS
the guided walk-thru of Gascho's system at 11:30 am with solar expert Leon Bontrager. Refreshments will be served!

3 Hess Residence

506 Carter Road, Goshen, Indiana



5 kW Grid-tied Solar Electric System

After a leak in their pool proved to be very expensive to repair or replace, this retired couple decided to fill in the pool to create an expanded garden and patio area. That left the poolhouse standing with little purpose, that is until they decided to install solar PV panels on the roof. The rack holding the 5 kW system was built with room at the top for another row of panels to be added to the system.

System Components

- 24 Kyocera 210 Watt solar modules; two rows of 12
- Sunny Boy 6000US Inverter

System Designer
Home Energy, LLC

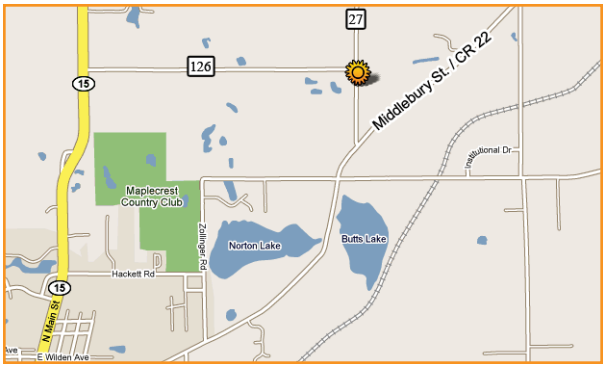
System Installer
Home Energy, LLC

Date of System Completion
August 2009

For roof solar systems, a south-facing slope is best with little to no shading from trees or other building structures. You will need adequate roof space, anywhere from 150-1,000 square feet depending on system size. Roof mounted systems can be designed to accommodate varied angled roofs to flat roofs.

4 Shantz Residence

60728 County Road 27, Goshen, Indiana



Solar Thermal Hot Water System

The solar hot water system uses PV panels to directly power two circulation pumps and heats and stores a large amount of water (340 gallons) enabling the system to ride through prolonged cloudy days.

System Components

- Two flat plate solar thermal collectors
- Circulation pumps

System Designer

Homeowner

System Installer

Homeowner

Did you remember to register at each site for the chance to win a gift?

5 Reser Residence

19410 Dorchester Court, Bristol, Indiana

5.5 kW Grid-Tied Solar Electric System and Solar Hot Water System

This residential 5.5 kW solar PV grid-tied system and solar thermal water heating are a part of the many deliberate decisions made by this homeowner to build their new home “green” and in compliance to receive LEED (Leadership in Energy and Environmental Design) rating. To receive the LEED rating, new construction has to meet specific criteria for sustainability and green product use.

System Components

- 26 Kyocera 210 Watt solar modules
- Sunny Boy 6000US Inverter
- Two Apricus evacuated tube solar thermal collectors
- Equinox residential tank
- Quietside flash heater

System Designer

Home Energy, LLC

System Installer

Home Energy, LLC

Date of System Completion

June 2009

Additional Sustainable Measures @ the Reser Home

- Absorb heat from the sun through south-facing windows into hard interior surfaces - tile made from 50 percent recycled content
- Extend roof eaves to prevent sun entering a home in the hot summer months, but allow low-winter sunlight to come into the house for warmth during the cold season
- Structural insulating panels were factory-made offsite by sandwiching a core of rigid foam plastic insulation between two skins of wood to make the home tighter and more energy efficient
- Geothermal pump heating and cooling system

6 Wolfgang Residence

65364 Dailey Road, Edwardsburg, Michigan

3.15 kW Grid-tied Solar Electric System and Solar Hot Water System

This new construction home had a solar PV system installed on the roof. The homeowner also had two 30-tube solar thermal collectors installed for water heating.

System Components

- 15 Kyocera 210 Watt solar modules
- Sunny Boy 4000US Inverter
- Two evacuated tube solar thermal collectors
- Dual heat exchanger tank

System Designer

Home Energy, LLC (PV system)
Solar Enterprises (Solar Thermal system)

System Installer

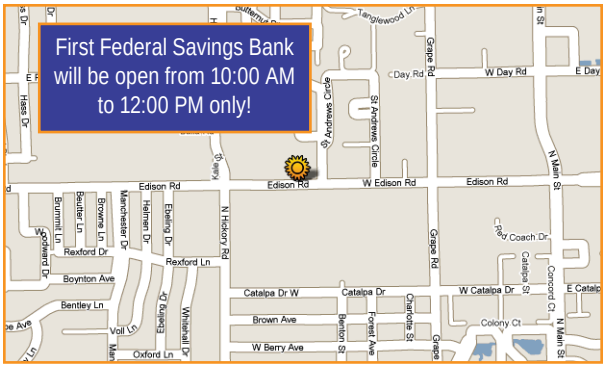
Home Energy, LLC (PV system)
Solar Enterprises (Solar Thermal system)

Date of System Completion

August 2009

7 First Federal Savings Bank

906 W. Edison Road, Mishawaka, Indiana



8.1 kW Solar Electric System

The First Federal Savings Bank in Mishawaka, IN is the first LEED certified bank branch in Indiana. While the "green" building costs about eight to 10% more than a conventional building, the Bank Manager estimates reduced energy costs will pay off the initial difference within three to four years.

System Components

- 8.2 kW solar array
- Two Sunny Boy Inverters
- Fat Spaniel Insight Views system monitors and displays energy production; solar and wind generation is publicly displayed inside the branch on a TV screen

System Designer

Inovateus Solar

System Installer

Home Energy, LLC

Date of System Completion

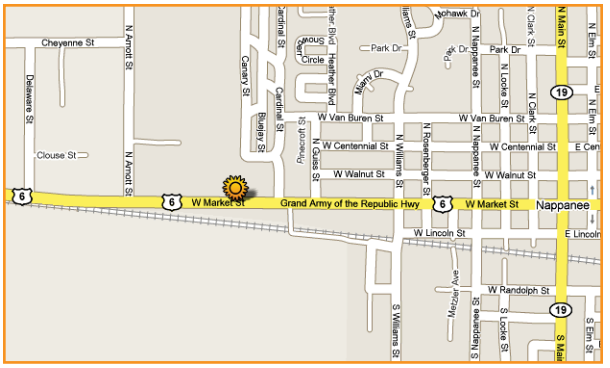
May 2008

Additional Sustainable Measures @ First Federal Savings Bank

- Eight inch thick walls made of Agriboard
- Geothermal system that uses the earth and/or ground water as a source of heat in the winter and cooling power in the summer
- Two wind turbines
- A band of narrow windows along the top of the wall called clere-story windows to reduce electricity usage
- Permeable pavement that allows the movement of water and air through the paving material
- V-shaped roof to maximize the PV panels ability to collect sunlight

8 McCormick Motors

1255 W Market Street, Nappanee, Indiana



6 kW Grid-tied Solar Electric System

McCormick Motors 6kW Solar Grid-Tied System was partially funded with a grant winning from the Alternative Power and Energy Grant Program. Gordon Moore, owner of this auto dealership in Nappanee, IN, has been researching renewable energy and energy conversation over the past decade. This project, which was designed in conjunction with an Economics Class at Goshen College, serves as an ongoing educational site for Goshen College.

System Components

- 28 Sharp 216 Watt solar modules
- Sunny Boy 7000US Inverter
- Sunny SensorBox and WebBox systems monitors

System Designer
Home Energy, LLC

System Installer
Home Energy, LLC

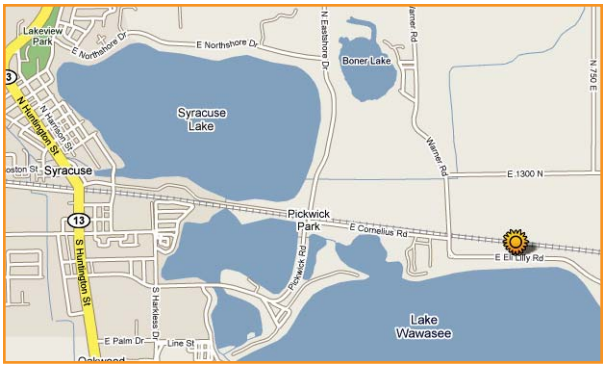
Date of System Completion
February 2009

Additional Sustainable Measures @ McCormick Motors

- Added insulation
- High-efficiency lighting
- Programmable equipment which is turned on by demand only
- Waste oil furnace

9 Levinson Residence - The Low Carbon Lakehouse

7041 E Eli Lilly Road, Syracuse, Indiana



5.5 kW Grid-tied Solar Electric System, Solar Hot Water and Air Heating System

This home is worth the drive to beautiful Lake Wawasee! The solar PV system powers the house and the solar thermal system heats the water and the home. This passionate homeowner considers his home itself to be a second storage system, besides the water tank. He will let it heat up on sunny days and store up in the tank and in the house, then let the temp coast back down. He likes to treat his home as a "lab," monitoring generation and output data online and figuring out how to optimize the system. His goal is to have a zero-carbon house. He also notes that it is important to cut down usage and make sure everything is efficient first, and then bring in solar!

System Components

- 26 Kyocera 210 Watt solar modules
- Sunny Boy 7000US Inverter
- Sunny Boy SensorBox and WebBox systems monitor
- Five Apricus evacuated tube solar collectors
- Quietside flash heater
- Grundfos water pump
- Equinox residential tank

System Designer
Home Energy, LLC

System Installer
Home Energy, LLC

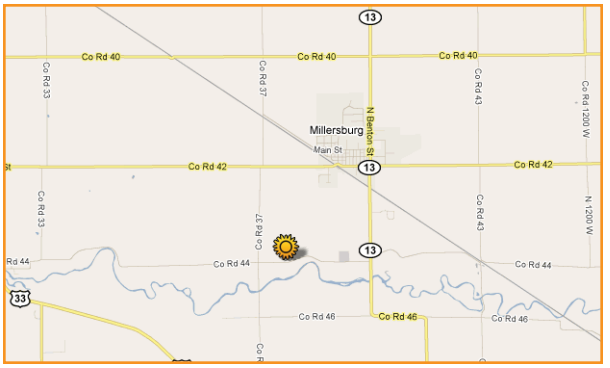
Date of System Completion
August 2009

Additional Sustainable Measures @ the Levinson Home

- Replaced all standard light bulbs
- Replaced refrigerators with high efficiency brand

10 Bowman Residence

12772 County Road 44, Millersburg, Indiana



6.3 kW Grid-tied Solar Electric System

With a shaded house, this large 6.3 kW grid-tied solar system was installed on the barn roof. Because the roof is nearly flat, the solar PV panels required additional racking to get an optimal angle for solar collecting

System Components

- 30 Kyocera 210 Watt solar modules; three rows of 10
- Sunny Boy 7000US Inverter

System Designer

Home Energy, LLC

System Installer

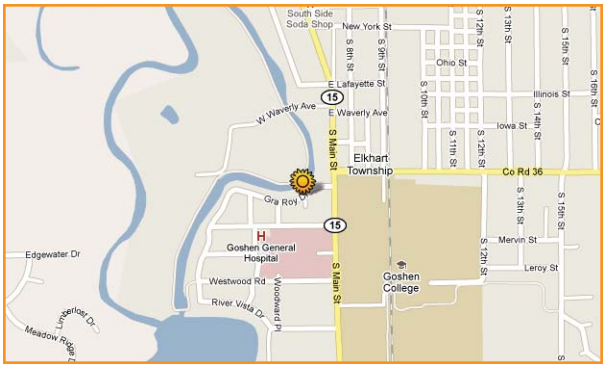
Home Energy, LLC

Date of System Completion

September 2009

11 Buschert Residence

216 Gra-Roy Drive, Goshen, Indiana



Solar Hot Water System and Ground Source Heat Pump

This home features a self designed and self installed solar hot water system. It is a closed loop system with three old panels salvaged from a 1970's installation, a modern solar powered pump, and heat storage in two 55 gallon barrels insulated in a box in the basement. The system is hooked to a home built data recording system to monitor temperatures in the barrels and outgoing water and sunshine. This home also features a ground source heat pump installed in 2008 by Colliers.

System Components

- Three panels
- Solar powered pump
- Heat Storage in two 55 gallon barrels

System Designer

Homeowner self-designed

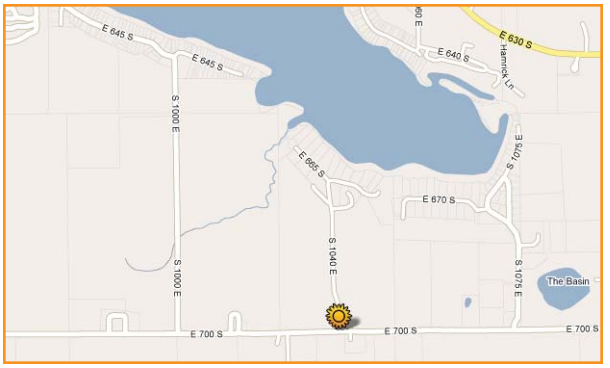
System Installer

Homeowner self-install
Heat pump installed by Colliers

Solar Electricity, or photovoltaics (PV), is light energy converted into electrical energy. Solar cells, which capture the sun's energy and change it into electricity, are interconnected to form solar panels or modules, which can in turn be connected into arrays to produce more power. Because of this modularity, PV systems can be designed to meet any electrical requirement, no matter how large or small. You can begin with a small system, sized so that you can add-on to power your entire home or business!

12 Prowse Residence

10390 E 700 S, Wolcottville, Indiana



1 kW Off-Grid Wind Turbine and 1 kW Off-Grid Solar PV System

System Components
- 1 kW off-grid wind turbine
- 1360 watt off-grid solar panels

System Designer
Solar Energy Systems LLC

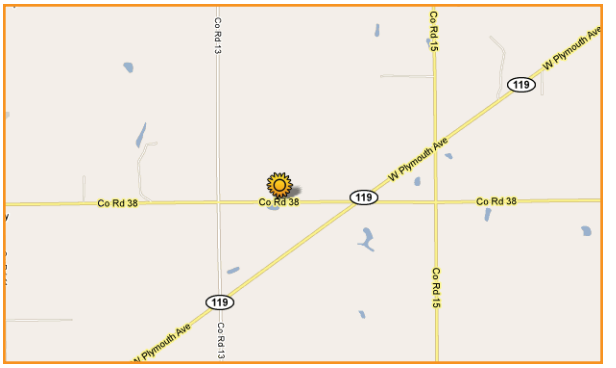
System Installer
Solar Energy Systems LLC

Date of System Completion
December 2009

Wind Energy, the terms wind energy or wind power describe the process by which the wind is used to generate mechanical power or electricity. Wind turbines convert the kinetic energy in the wind into mechanical power. Wind systems, like solar, can be sized for small or large applications, and can begin with a "starter" system to supplement power, then add-on later to power the whole home or business.

13 Kelly Residence

23725 County Road 38, Goshen, Indiana



5 kW Grid-Tied Wind Turbine and 3 kW Grid-Tied Solar PV System

System Components
- 5 kW grid-tied wind turbine
- 3360 watt grid-tied solar panels
- 12 kW back-up generator

System Designer
Solar Energy Systems LLC

System Installer
Solar Energy Systems LLC

Date of System Completion
August 2010

Did you remember to register at each site for the chance to win a gift?

14 Chupp Residence

30560 County Road 146, Nappanee, Indiana

1 kW Off-Grid Wind Turbine and 2 kW Off-Grid Solar PV System

System Components

- 1 kW off-grid wind turbine
- 2040 watt off-grid solar panels

System Designer

Solar Energy Systems LLC

System Installer

Solar Energy Systems LLC

Date of System Completion

August 2010

Grid-Tied Systems

Grid-tied systems harness the energy from the sun and/or wind and connect to your existing electrical system through a standard meter. This low maintenance system can be used for residential or large commercial projects. An individual grid-tied system can be added to your existing buildings or it can be integrated into new construction.

Net metering is the billing arrangement between the utility company and a customer with a grid-tied renewable energy system. If the system produces more energy than the building requires, the remainder is pushed back onto the grid and is purchased/credited by the utility company.

Off-Grid Systems

Off-grid systems provide all the power you use and store energy in batteries, with no connection to the utility. They are ideal for cabins and remote sites, or in places where utility-generated power is either unavailable, undesirable, or too costly to hook up. A home system typically consists of solar panels or wind generator, a back-up battery, a charge controller, wiring and support structure.

no connection to the utility - no problem!

The solar panels or wind generator connect to a battery, and the battery in turn to the load. In systems with a generator, solar panels and wind generators supply energy needs and charge batteries. If the batteries run low, the engine generator runs until the batteries are charged. The generator makes up the difference when electrical demand exceeds the combined output of the renewable energy system and the batteries.

Solar Thermal Collectors

There are two main types of solar collectors, Flat Plate Solar Collectors and Evacuated Tube Solar Collectors.

Flat Plate Solar Collectors are weatherproofed, insulated box containing a black metal absorber sheet with built in pipes is placed in the path of sunlight. Solar energy heats up water in the pipes causing it to circulate through the system by natural convection:

- Designs generally consist of 1) a flat-plate absorber, which intercepts and absorbs the solar energy, 2) a transparent cover(s) that allows solar energy to pass through but reduces heat loss from the absorber, 3) a heat-transport fluid (air, antifreeze or water) flowing through tubes to remove heat from the absorber, and 4) a heat insulating backing

Evacuated Tube Solar Collectors have multiple evacuated glass tubes which heat up solar absorbers and, ultimately, solar working fluid (water or an antifreeze mix) in order to heat domestic hot water, or for hydronic space heating:

- The constant profile of the round tube means that the collector is always perpendicular to the sun's rays and therefore the energy absorbed is approximately constant over the course of a day

Glossary of Terms

Solar Electric - Solar electricity is photovoltaic (PV) energy. PV means the ability to convert light directly into electricity and using it to power appliances, lights, etc., which reduces the amount of electricity you need to purchase from your power company.

Solar Thermal - Capturing heat from the sun and using it to heat a home and water, which reduces the amount of gas or electricity your water heater consumes. Solar hot water systems heat water used for laundry, bathing and dishes, as well as for commercial or industrial applications. Solar air heating provides a supplemental heating source that reduces the load on the primary heating system by warming the air in a building during daylight hours.

Solar module - Solar cells, which capture the sun's energy, are interconnected to form solar panels or modules, which can in turn be connected into arrays to produce more power.

Inverter - After the power is collected from the PV panels or wind generator, it has to be modified from DC power to usable AC power. The inverter does the converting, and is arguably the "heart" of the system.

Grid-tie System - Connects your solar PV system to your existing electrical system through a standard meter.

Off-grid System - Off -grid systems provide all the power you use and store energy in batteries, with no connection to the utility. Ideal for cabins and remote sites, or in places where utility-generated power is either unavailable, undesirable, or too costly to hook up.

Kilowatt - A unit of power equal to 1000 watts. Power is the rate at which energy is generated and consumed.

Kilowatt-hour - A unit of energy, equivalent to the energy transferred or expended in one hour by one kilowatt of power. For example, if a 100W light bulb is turned on for one hour, the energy used is 100 watt-hours (W·h) or 0.1 kilowatt-hour. The "average" annual energy consumption of a household in the United States is about 8,900 kilowatt-hours, equivalent to an average power of about 1 kW.

Wind Energy - Wind energy or wind power describes the process by which the wind is used to generate mechanical power or electricity. Wind turbines convert the kinetic energy in the wind into mechanical power.

Geothermal Pump - Geothermal heat pump or ground source heat pump (GSHP) is a central heating and/or cooling system that pumps heat to or from the ground.

Frequently asked questions

Is my area really sunny enough for solar? Yes! PV systems can generate power in all types of weather. On partly cloudy days, they can turn out as much as 80% of their potential energy, and on extremely overcast days, they can still produce about 25% of their maximum output. If you live in an area with a changing climate and snow, don't worry! PV modules are relatively unaffected and are actually more efficient in colder weather! Panels are angled to catch the sun, so any snow that collects melts fairly quickly.

What size PV system do I need to run my whole house? There is no "one size fits all" PV system. People commonly say "my house/business is x square feet, how big of a system do I need?" or "what size of system do I need to power x appliances?" Instead, we need to know how much electricity do you use on average, and how much of that would you like to offset.

How do I know if my house is good for wind? Commercial wind systems and wind farms are excellent investments. For home installations, you must live in an area with average annual wind speeds of at least 4.0-4.5 meters per second (9-10 miles per hour). Local building codes or covenants must allow you to legally erect a wind turbine on your property. Consider obstacles that might block the wind in the future.

A "hybrid" system utilizing both solar and wind is an excellent choice for seasonal states like Indiana. Solar is produced at the hottest part of the day and year, in the summer. Wind is strongest in the winter months and at night, so together they create a sustainable energy solution.

How much does a renewable energy system cost? There are several components to the cost, including the cost of the system itself, installation, the cost of interconnection if applicable, and maintenance. Typically, solar electric and wind systems cost on average $5-$8 per watt installed, not including interconnection and maintenance. With moving parts, wind generators usually require more maintenance than solar systems. Like a car, regular maintenance and system checks are recommended to keep all equipment in optimal working order, but it is not required. Financing a residential renewable energy system can be an attractive alternative for many homeowners. In some cases, customers can even realize a positive cash flow from day one, as the money saved on their electricity bill is greater than the monthly payment for their system!

Does it really make sense to spend so much? It's just not affordable for me. You are actually affording it already. If you currently spend $200 a month on electricity, that's $2400 a year or $24,000 over the next 10 years. Then factor in a conservative yearly increase of 4.5% (national average based on PUC-public utilities commission), you will have spent $35,677 with no return on your dollars. If you spend that amount on a solar or wind energy system, either upfront or through financing, at least you will get a return on your investment.

About The Local Sponsors

Home Energy, LLC, a full service renewable energy contractor specializing in education, sales, installation and service, has been helping people worldwide make use of the sun and wind's inexhaustible sources of energy since 2000. We specialize in solar electric and wind systems - grid-tie or off -grid - solar thermal systems, and battery back-up systems utilizing power inverters.

Home Energy carries an extensive line of renewable energy products. Our team includes professionals experienced and licensed in designing, installing and servicing renewable energy systems. We provide technical expertise with unmatched customer service.

For four years, Home Energy has organized and sponsored the Michiana Solar Tour, a self-guided tour of sites using renewable energy like solar and other green practices. It is a FREE tour featuring homes in Northern Indiana and Southwest Michigan.

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Inovateus Solar LLC is a full-service integrator, provider and wholesale distributor of renewable solar energy systems and components for a broad spectrum of small to large installations and developments worldwide.

Working with our national and international network of solar technology distributors and installers, Inovateus Solar designs and engineers the technology and support for the installation of photovoltaic systems to meet the requirements of large facilities, governmental agencies, municipal institutions and planned developments.

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INdiana Renewable Energy Association

Indiana Renewable Energy Association is established for the purpose of representing businesses which produce and consumers who use renewable energy throughout the State of Indiana.

InREA is an Indiana non-profit organization that focuses on service and public education awareness.

InREA will promote the use of renewable energy technologies, environmental sustainability and economic development in the State of Indiana.

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