

# ALTERNATIVE ENERGY OVERVIEW & OPTIONS

## For Use By Residents, Businesses & Institutions

### This document includes:

- how to get started on adding energy-saving measures to your home or workplace,
- overview of the main alternative energy types available,
- web links for further information, and
- details on Ohio-based companies providing alternative energy services and materials.

## How to Get Started

### ***Perform an energy audit***

- An energy audit is a comprehensive examination of the structure and energy systems in your facility or building.
- The audit will:
  - Identify cost-effective, energy-saving measures in your facility.
  - Evaluate the performance of your facility's heating, ventilating, and cooling systems.
  - Screen your facility for opportunities to conserve water and use clean, renewable energy systems.
  - Create action plans for greater energy and water efficiency.

### ***Select Alternative Energy Options***

- Choose renewable energy technologies and energy efficiency options you would like to pursue.
- You can select just one or combinations of two or more types.

### ***Explore Available Funding & Credits***

- Look into financial incentives for tax credits, available grants, and renewable energy credits.
- Visit the GEO & DSIRE websites.

### ***Contact a consultant/contractor/supplier***

- Contact a group to help you implement your selections.
- You can get assistance from start to finish:
  - Energy audits.
  - Recommendation on ideal alternative energy selections for your facility.
  - Available funding research and applications.
  - Construction/installation of the alternative energy equipment and materials.
- See attached Ohio-based companies list.

*If you have further questions about alternative energy, please feel free to contact the City of Newark. The City Planner, Kimberly Burton, can be reached at (740) 670-7547 or [kburton@newarkohio.net](mailto:kburton@newarkohio.net).*

# ALTERNATIVE ENERGY OVERVIEW & OPTIONS

## Renewable Energy & Energy Efficiency

### Solar Energy

- Solar energy is used to generate electricity, heat water, cook food, and warm buildings. People can use solar energy to reduce their monthly utility costs, reduce their carbon footprint, bring energy to rural areas, and to gain a greater sense of energy independence.

| Solar Energy Types   |   |
|--|---|
| Photovoltaic (PV)  | Thermal   |
| <ul style="list-style-type: none"><li>▪ Photovoltaic systems use solar cells to convert the sun's rays into electricity.</li><li>▪ People can generate electricity in a clean, reliable, and quiet way that can offset the cost of future electricity costs and decrease their dependence on the energy grid.</li><li>▪ Most manufacturers warranty their products power output for a minimum of 20 years, but a system should last at least 25 – 30 years.</li><li>▪ Most roofs can accommodate photovoltaic cells.</li></ul> | <ul style="list-style-type: none"><li>▪ Solar thermal systems can be used to heat water, pools/hot tubs, and to provide radiant heating.</li><li>▪ These systems will heat water to 140°F or higher, matching the range of traditional hot water tanks.</li></ul> |

### Wind Energy

- Wind resources are best utilized along coastlines, on hills, and in the northern states, but usable wind resources can be found in most areas.
- Wind energy is less predictable than solar energy, but it is also typically available for more hours in a given day.
- Wind is influenced by terrain and other factors that make it much more site specific than solar energy, thus using wind energy must be considered more carefully than solar energy.
- Wind energy follows seasonal patterns that provide the best performance in the winter months and the lowest performance in the summer months, which is just the opposite of solar energy.

### Geothermal Energy

- Geothermal systems use the earth or wellwater for heating, cooling and hot water.
- A heat pump “moves” energy from one location to another, instead of creating heat by burning fossil fuels, such as a gas furnace does.
- A Geothermal system is the most effective renewable energy resource for homes and business.
- Applications include air heating & cooling, water heating, and add-on splits to fossil fuel furnaces.

### Hybrid Systems

- Because wind and solar systems peak at opposite times of the year, they work well together in hybrid systems, which provide a more consistent year-round output than either wind-only or PV-only systems.
- Combinations of solar photovoltaic, solar thermal, wind, and geothermal are possible and these hybrid systems are more effective than just using one type of system.

### Energy Efficiency

- Energy efficiency involves implementing changes in technologies, equipment, common practices and habits to save energy, reduce operating and maintenance costs, increase productivity, and reduce carbon footprint.
- Making your home or workplace more energy efficient is the less expensive and easiest way to reduce your energy costs and your carbon footprint.

| Applications   |   |
|--|---|
| <ul style="list-style-type: none"><li>▪ Lighting &amp; Lighting Controls/Sensors</li><li>▪ Daylighting</li><li>▪ Programmable Thermostats &amp; Furnaces</li><li>▪ Water Heaters, Boilers, Heat pumps</li><li>▪ Air conditioners, Compressed air</li><li>▪ Clothes Washers/Dryers</li><li>▪ Refrigerators, Freezers &amp; Chillers</li></ul> | <ul style="list-style-type: none"><li>▪ Motors, Motor-ASDs/VSDs</li><li>▪ Building Insulation, Windows, Doors</li><li>▪ Caulking/Weather-stripping, Duct/Air sealing</li><li>▪ Siding &amp; Roofs</li><li>▪ Energy Mgmt. Systems/Building Controls, Comprehensive Measures/Whole Building</li></ul> |

### Other Alternative Energy Types

- Landfill Gas, Biomass
- Hydroelectric
- Fuel Cells
- CHP/Cogeneration
- Reciprocating Engines
- Anaerobic Digestion
- Microturbines
- Other Distributed Generation Technologies, etc.

# ALTERNATIVE ENERGY OVERVIEW & OPTIONS

## Agency & Informational Web Links (not all-inclusive)

### Governmental Agencies:

- Incentives for Renewable Energy & Energy Efficiency: [www.dsireusa.org](http://www.dsireusa.org)
  - *Federal & State tax deductions, credits, exemptions, and grants for residential & non-residential.*
- Office of the Ohio Consumers' Counsel: [www.pickocc.org/smartenergy/gogreen.shtml](http://www.pickocc.org/smartenergy/gogreen.shtml)
  - *Ohio utility's green pricing programs.*
- Ohio Energy Office: [development.ohio.gov/cdd/oeo/](http://development.ohio.gov/cdd/oeo/)
  - *Connects companies and communities to financial and technical resources to deploy renewable energy technologies and energy efficiency.*
- US Department of Energy (USDOE), Energy Efficiency & Renewable Energy Office: [www.eere.energy.gov/](http://www.eere.energy.gov/)
  - **Net Metering:** *USDOE net metering policies and information by state.*

### Non-Profit Groups (Ohio):

- Green Energy Ohio: [www.greenenergyohio.org](http://www.greenenergyohio.org)
  - *Non-profit organization with information on green publications, rebates, jobs, training programs, alternative energy, economics, and news.*
  - **Resources** – *Resource links on policy, grants, incentives, tax credits, renewable energy directories, energy estimator, systems, alternative energy types, and Ohio renewable energy history.*
- Environment Ohio: [www.environmentohio.org/](http://www.environmentohio.org/)
  - *Citizen-based environmental organization doing research and advocacy.*
- Environmental Defense Fund: [www.edf.org](http://www.edf.org)
  - *Group partnering with businesses, governments & communities to find practical environmental solutions.*
- Ohio Environmental Council: [www.theoec.org/](http://www.theoec.org/)
  - *Environmental advocate doing legislative initiatives, legal action, research, and statewide partnerships.*
- Solar Energy Ohio: [www.solarenergyohio.com](http://www.solarenergyohio.com) (under construction)
  - *Network of solar power and solar energy contractors in Ohio by County.*
- Ohio Wind Working Group: [www.ohiowind.org/](http://www.ohiowind.org/)
  - *Forum on wind energy development information in the State of Ohio to address obstacles in wind energy development and educate the public on the benefits of wind energy.*
- Geothermal Energy Association: [www.geo-energy.org](http://www.geo-energy.org)
  - *Trade association supporting the expanded use of geothermal energy and developing geothermal resources for electrical power generation and direct-heat uses.*

### Non-Profit Groups (National):

- American Solar Energy Society: [www.ases.org](http://www.ases.org)
  - [www.findsolar.com](http://www.findsolar.com): *helps home and business owners get the information and education they need when researching Solar Power and Renewable Energy projects.*
- American Wind Energy Association: [www.awea.org/](http://www.awea.org/)
  - **Small Wind:** *information on buying and installing a small wind turbine.*

### Other Information Resources:

- Homepower Online Magazine: [www.homepower.com](http://www.homepower.com)
  - *For homeowners, business owners, and renewable energy professionals to exchange equipment, design, installation, and system performance experiences.*
- RET Screen: [www.RETscreen.net](http://www.RETscreen.net)
  - *Free solar energy estimating site.*

## Alternative Energy Industries in Ohio

| Renewable Energy Sector | Total Businesses | Renewable Energy Businesses | Auxiliary Services (consultants, non-profits, law firms, trade assn's) |
|-------------------------|------------------|-----------------------------|--|
| Wind                    | 269              | 221                         | 48   |
| Solar                   | 160              | 118                         | 42   |
| Biomass                 | 101              | 62                          | 39   |
| Geothermal              | 130              | 93                          | 37   |
| Fuel Cells              | 159              | 115                         | 44   |
| <b>Total</b>            | <b>502</b>       | <b>444</b>                  | <b>62</b>  |

Please see attached list for a directory of Ohio-Based Alternative Energy Companies.

Source: *Growing Ohio's Green Energy Economy*, Environment Ohio, March 2009.



**Columbus – Statewide Main Office**  
7870 Olentangy River Rd., Suite 209  
Columbus, OH 43235  
Toll-Free 1.866.473.3664 / 614.985.6131  
geo@greenenergyohio.org

**Cleveland – Northeast Ohio Office**  
216.526.5545

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## ***RENEWABLE ENERGY INSTALLERS IN OHIO***

*The companies listed below are categorized by certified and non-certified PV Installers and in alphabetical order. A company must include at least one certified installer in order to be listed as certified. Inclusion on this directory is not an endorsement by Green Energy Ohio.*

### **Certified Photovoltaic Installers/Integrators in Ohio<sup>i</sup>**

#### **APPALACHIAN RENEWABLE POWER SYSTEMS LTD.**

- Type: Design, Installation, Sales, and Service
- Products Available: Solar Electric and Solar Hot Water Systems
- Services: Complete System Design, Sales, Installation and Service

**CONTACT:**

Gary Easton  
740-277-8498  
arp-solar.com  
[gary@arp-solar.com](mailto:gary@arp-solar.com)

**Comments:** "NABCEP certified installer dedicated to quality installations and customer satisfaction."

#### **ADVANCED DISTRIBUTED GENERATION, LLC**

- Type: Retailer, Full Service Engineering & Contracting
- Products Available: PV systems including commercial and utility scale; solar hot water
- Services: Installation, Sales and Service Provider
  - PV: over 700 kW installed
  - Solar Hot Water: 250 Serviced & 30 Installed
  - System Design / Site Analysis
  - Maintenance / Servicing
  - Technical Assistance
- Two NABCEP Certified Photovoltaic Installers\*: NABCEP Certified Solar Thermal Installer

**CONTACT:**

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**Cleveland – Northeast Ohio Office**  
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John Witte, President  
2600 Dorr Street  
Toledo, OH 43607  
Phone: 419-530-3792  
[jwitte@advanced-dg.com](mailto:jwitte@advanced-dg.com)  
[www.advanced-dg.com](http://www.advanced-dg.com)

**Comments:** "Ohio's leading large-scale PV system integrator with 40 years combined experience in the renewable energy industry."

**John Witte:** John founded Integrated Solar in 1995, and then Advanced Distributed Generation (ADG), LLC in 2001 to provide solar system design, installation and repair services. ADG's customers include Department of Defense, State of Ohio, State of Michigan, National Park Service, and educational projects funded by the Foundation for Environmental Education. John received BS degrees in Construction Management and Mechanical Engineering, and is a certified North American Board of Certified Energy Practitioners (NABCEP) Photovoltaic and Solar Thermal Installer. He serves as co-founding member of the Ohio Clean Energy Business Association (OCEBA).

## DOVETAIL SOLAR AND WIND

- Type: Retailer, Service Provider, Contractor, Consultant
- Products Available: Solar Electric (grid-tie, net metering, back-up and off-grid), Thin-Film Building Integrated PV, Wind Power Systems (1-50kW generators on tilt-up, guyed or free standing towers), Solar Hot Water Radiant/Hydronic Floor Heating, On-demand Hot Water Heaters, Microhydro Power Systems, Solar Water Pumps, Energy Efficient Appliances (refrigerators, washing/drying machines, lights), Portable Power Generators, Batteries, Battery Chargers, Inverters, Controls, Meters, RV and Marine Power Supply, Natural Lighting, Solar Attic Vents, High-Quality Air and Water Filters, Clean-Air Furnaces, Outdoor Wood-Fired Furnaces. Efficient Structures: Energy Wise Systems, Passive Solar
- Dealerships: BP Solar, Sanyo, Schott, Sharp and other solar photovoltaic panels, Uni-Solar building integrated photovoltaic laminate & shingles (factory trained installer) Abundant Renewable Energy (ARE), AWP, Bergey, Kestrel, and Eoltec wind turbines, Fronius,-Outback, PV Powered, SMA, & Vanner power inverters and charge controllers, Trojan and other storage batteries, Heliodyne and Sunda solar thermal systems, Energy Wise Systems pre-built high efficiency building panels. Dankoff Solar and Pumps
- Services: available for residential, commercial & non-profit clients worldwide  
Design, Installation, Sales, Feasibility Assessments
  - PV: 40 (15 grid interactive, 25 grid-tied/off-grid with batteries)
  - Wind: 9 (6 grid interactive, 3 off-grid)
  - Solar Thermal Heating
  - Component Sales
  - Technical Assistance/Advice
  - Maintenance/Serviceing
  - Energy Use and Efficiency Assessment

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- Site Analysis
- Renewable Energy System Design
- Education/Training
- Architectural Design
- Construction/Green Building

**Central Ohio Office:**

89 South Stanwood Rd.  
Bexley, OH 43209  
614-937-4486

**CONTACT:**

Dave Cohen

[dcohen@dovetailsolar.com](mailto:dcohen@dovetailsolar.com)

**Southeast Ohio:**

16675 Canaanville Hills Rd.  
Athens OH 45701  
740-592-1800  
www.dovetailsolar.com  
info@dovetailsolar.com

**CONTACT:**

Matthew Bennett  
NABCEP Certified PV  
Installer\*  
GLREA Certified PV

System Integrator/Installer

**Northern Ohio:**

9116 Lake In the Woods Trail  
Chagrin Falls, OH 44023  
440-543-7069

**CONTACT:**

Alan Frasz  
Vice President

[afrasz@dovetailsolar.com](mailto:afrasz@dovetailsolar.com)

**Southwest Ohio:**

513-253-1945

**Comments:** *"Dovetail Solar and Wind, a full service provider of renewable energy systems, has been bringing appropriate technology to homes and businesses since 1994. We specialize in solar and wind, building integrated photovoltaic arrays, solar hot water systems, and energy efficient structures. We are one of the area's most experienced authorities on renewable power generation and "green" building. Whether you want to add renewable energy generation at your existing home or business or you're planning new construction, we will help you determine the best options for your project."*

## MARINER ENERGY SYSTEMS, LLC

- Type: Consultant, Installer, Service Provider, Dealer, Contractor
- Services: Design, Consulting, Project Management, Installation, Feasibility Assessments
- Products: Complete Solar PV/ Wind / Hybrid Systems for both ON & OFF Grid, with or without battery back-up for both residential and commercial applications.

**CONTACT:**

Carl Scheutzow,  
NABCEP Certified Solar Installer  
NJATC Certified Solar Installer  
IBEW Certified Electrician, 22+ years

1487 Jefferson Ave  
Brunswick, Ohio 44212  
Phone: 330-273-3391  
Cell: 216-375-6307

Email: [marinerenergy@adelphia.net](mailto:marinerenergy@adelphia.net)

**Comments:** "Renewable energy sources are a great financial, environmental and personal investment. Our trained professionals specialize in renewable electrical power distribution systems. All systems must start with a feasibility assessment so call us today."

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## REpower SOLUTIONS

- Type: Dealer, Installer, Trainer, Contractor, Consultant
- Products: Solar PV and Wind systems and components for off grid and grid interactive applications
- Services:
  - Design, Installation, Sales, Service, Technical Assistance, Workshops, Training
  - Workshops & Training for solar and wind electric systems for home and business
  - Home energy audits and ratings for existing homes and new construction
  - Energy audits for small commercial buildings

### **CONTACT:**

Erika Weliczko  
Ohio Electrical Licesnse #44844  
NABCEP Certified PV Installer\*  
Certified Home Energy Rater  
P.O. Box 91992  
Cleveland, OH 44101

(cell) 216.402.4458  
(fax) 216.803.6739  
[power@repowersolutions.com](mailto:power@repowersolutions.com)  
[www.repowersolutions.com](http://www.repowersolutions.com)

## SOLARIS BLACKSTONE

- Type: Dealer, Contractor, Consultant, Installer
- Products: Solar PV, Solar Thermal, Wind Power, Plumbing, Hydronics, Engineering
- Services: Solar and Wind Products, Service and Training
- Dealerships: AEE Solar Dealer

### **CONTACT:**

Steve Drago  
NABCEP Certified PV Installer\*  
Solaris Blackstone  
1775 Meloy Road  
Kent, Ohio 44240  
Phone: 330-221-2580  
Fax: 330-247-3988  
[sdrago@solarisblackstone.com](mailto:sdrago@solarisblackstone.com)  
[www.solarisblackstone.com](http://www.solarisblackstone.com)

**Comments:** Specializing in Grid Interactive Solar PV and serving NE Ohio in new construction, residential and commercial applications. Solaris Blackstone Energy, LLC was founded in 2007 on 20+ years experience in engineering, plumbing, hydronics, and contracting in NE Ohio. Solaris Blackstone employs a

NABCEP Certified PV Installer, an OCILB Licensed Plumber, and contracts Ohio Licensed Electricians.

## **SUNROCK SOLAR, LLC**

- Type: Consultant, Installer, Service Provider, Dealer, Contractor
- Services: Design, Consulting, Project Management, Installation
- Products: Direct Grid Tie Solar PV and Solar Hot Water Heating Systems for residential and commercial applications.

### **CONTACT:**

Carl Adams,  
NABCEP Certified Solar Installer  
11311 Foremark Drive,  
Cincinnati Ohio 45241  
Email: [info@sunrocksolar.com](mailto:info@sunrocksolar.com)  
Website: [www.sunrocksolar.com](http://www.sunrocksolar.com)

**Comments:** "SunRock Solar was founded based on the idea that renewable energy systems represent a viable and sustainable future for our communities. There is a limitless supply of sun, wind, and water energy available to us. Harnessing these resources to generate the power we need for our homes and businesses without polluting our environment is a sensible way forward for our energy future."

## **THIRD SUN SOLAR AND WIND POWER**

- Type: Retailer, Service Provider, Contractor, System Integrator, Residential and Commercial
- Products Available: Complete design and installation services for:
  - Solar (PV) Power Systems
  - Wind Power Systems
  - Wind-Solar Hybrid Systems
  - Solar Hot Water
  - On-grid and Off-grid Systems
  - All other RE components available including batteries, inverters, power controllers, metering, etc.
- Dealerships:
  - Sunpower Corporation
  - Shuco Corp.
  - Bergey Wind Power (factory trained dealer)
  - All major PV and equipment suppliers (Shell, BP, Evergreen, Sharp, SMA, Trace/Xantrex, Outback, etc.)
- Services: Design, Sales, and Installation for residential, commercial and institutional customers.  
Total systems installed through 2007:
  - PV – 139
  - Wind - 34
  - Hybrid - 17 (solar and wind combined)
  - Solar Thermal (hot water) - 10
  - Full RE system design services
  - Fully insured and bonded

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- Two NABCEP Certified PV Installers (Geoff Greenfield and Ben Appleby)
  - Two GLREA Certified PV Systems Integrator/Installers (Geoff Greenfield and Tim Dunning)
  - Licensed Electrician
  - Electrical Engineers on staff

**Athens Office**

340 West State St., Unit 25  
Athens, OH 45701  
740-597-3111 phone  
740-597-1548 fax  
info@third-sun.com

**CONTACT:**

Geoff Greenfield, Owner  
NABCEP Certified PV Installer\*  
GLREA Certified PV Installer/Integrator\*

**Cincinnati Office:**

**CONTACT:**

John Fanselow  
Cincinnati, OH  
513-561-9200

**Comments:** "Clean Energy, Expertly Installed. Third Sun is the region's leading clean energy installer. Third Sun is a full-service and experienced renewable energy partner, providing renewable energy solutions that work, whether for your commercial project or your home. We draw on our technical knowledge and vast field experience to design and install the best system for each customer. We are committed to excellent service and have a professional and friendly office and field staff that help you through every step of the design and installation of your solar or wind system. We have electrical engineers, licensed electricians and nationally certified designers and installers on staff. See what our customers have said about us at our website, <http://www.third-sun.com/aboutus.html#testimonials>"

## **Other Identified Renewable Energy Installers**

### **NORTHEAST OHIO**

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**LTI POWER SYSTEMS**

**CONTACT:**

108000 Middle Ave., Bldg B  
Elyria, OH 44035  
(440) 327-5050  
[sales@ltipowersystems.com](mailto:sales@ltipowersystems.com)  
[www.ltipowersystems.com](http://www.ltipowersystems.com)

**THE RENAISSANCE GROUP**

An appropriate technology consulting think-tank

**CONTACT:**

Aaron Godwin, Founder  
10299 Longview Drive  
Kirtland, Ohio 44094  
Phone: (216) 832-1931  
Email: [AAron@ConserveFirst.com](mailto:AAron@ConserveFirst.com)

**RENEWABLE ALTERNATIVES ENERGY**

**CONTACT:**

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## **INTERNATIONAL, INC.**

Qadwi Bey  
3642 East 131<sup>st</sup> Street  
Cleveland, OH 44120  
Phone: (216) 431-0200  
Email: [raenergyint@earthlink.net](mailto:raenergyint@earthlink.net)

## **WIND TURBINES OF OHIO, LLC**

**CONTACT:**  
Greg Courtney  
981 East State Street  
Alliance, OH 44601  
Phone: (330) 502-1250  
Email: [gacourtney@sbcglobal.net](mailto:gacourtney@sbcglobal.net)  
[www.windturbinesofohio.com](http://www.windturbinesofohio.com)

# **NORTHWEST OHIO**

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## **BIO-GAS TECHNOLOGIES**

Bio-Gas Technologies is an experienced builder, having built many types of power stations around the world. Builder of one of the first landfill gas-to-energy systems in the United States and one of the first Coal Mine Methane systems, we build and find solutions for both private industries and public entities.

**CONTACT:**  
John Gaydos  
1 Continental Way  
Norwalk, OH 44857  
(419) 663-8000  
[jgaydos@biogastech.com](mailto:jgaydos@biogastech.com)  
[www.BioGasTech.com](http://www.BioGasTech.com)

## **NORTHCOAST WIND AND POWER**

Services: Utility grade wind power and generation facilities

**CONTACT:**  
Linda Woods  
PO Box 298  
Port Clinton, OH 43452  
(419) 341-7479  
[controller@northcoastwindandpower.com](mailto:controller@northcoastwindandpower.com)

# **CENTRAL OHIO**

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**E-3 DESIGN**

**CONTACT:**

Eric Lang  
507 S. High St.  
Yellow Springs, OH 45387  
937-767-2488 tel.  
[eric.y0@dmmc.com](mailto:eric.y0@dmmc.com)

**SOLARWIND TEK**

**CONTACT:**

Eric Sisco  
London, OH  
Phone: 740.837.0649  
Email: [esisco@solarwindtek.com](mailto:esisco@solarwindtek.com)  
[www.solarwindtek.com](http://www.solarwindtek.com)

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## **SOUTHWEST OHIO**

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**BLUE CHIP SOLAR AND WIND**

**CONTACT:**

Perry Leitner  
10939-A Reed Hartman Highway  
Cincinnati, OH 45242  
513-351-9463  
[perry@BCSandW.com](mailto:perry@BCSandW.com)

**ENTROPY, INC.**

**CONTACT:**

Randy Sizemore  
8927 Blossom Drive  
Cincinnati, OH 45236  
513-891-7620  
[entran07@aol.com](mailto:entran07@aol.com)

***\*Inclusion on this list does not indicate an endorsement by Green Energy Ohio.\****

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<sup>i</sup> Certified installers have been designated as such by the North American Board of Certified Energy Practitioners (NABCEP [www.nabcep.org](http://www.nabcep.org)) and the Great Lakes Renewable Energy Association (GLREA [www.glrea.org](http://www.glrea.org)) where they have completed all testing and work experience as required by NABCEP & GLREA for certification. For more about certification requirements, please visit the GEO website at [www.greenenergyohio.org](http://www.greenenergyohio.org).

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**Table 11. Renewable Energy Businesses & Auxiliary Services in Ohio  
(listed by region)**

| Company                                     | Renewable Energy Sector                     | Service                     | Region  | County    | City         |
|---|---|-----------------------------|---------|-----------|--------------|
| Champaign Advocates for Renewable Energy    | biomass, fuel cell, geothermal, solar, wind | non-profit                  | Central | Champaign | Champaign    |
| Roberts Brothers Heating & Air Conditioning | geothermal                                  | installer                   | Central | Champaign | Saint Paris  |
| Honeywell                                   | wind  | obstruction lighting        | Central | Champaign | Urbana       |
| Rittal Corp.                                | wind  | wind farm control equipment | Central | Champaign | Urbana       |
| Babcock & Brown                             | wind  | renewable energy developer  | Central | Champaign |              |
| Everpower Renewables                        | wind  | wind energy developer       | Central | Champaign |              |
| Invenergy                                   | solar, wind                                 | renewable energy developer  | Central | Champaign |              |
| DeLong Air Inc                              | geothermal                                  | installer                   | Central | Clark     | Springfield  |
| Hauck Bros Heating & Air Conditioning       | geothermal                                  | installer                   | Central | Clark     | Springfield  |
| Konecranes                                  | wind  | overhead lifting equipment  | Central | Clark     | Springfield  |
| TPI Composites, Inc                         | wind  | composite structures        | Central | Clark     | Springfield  |
| Sky Climber Wind Solutions                  | wind  | blade services and repair   | Central | Delaware  | Delaware     |
| NexTech Materials                           | fuel cell                                   | fuel cell stacks            | Central | Delaware  | Lewis Center |
| Ohio Energy Project                         | biomass, fuel cell, geothermal, solar, wind | education                   | Central | Delaware  | Lewis Center |
| Emega Technologies                          | wind  | research and development    | Central | Fairfield | Lancaster    |
| Fairfield Heating & Cooling                 | geothermal                                  | service and sales           | Central | Fairfield | Lancaster    |
| McCullough Heating & Cooling                | geothermal                                  | installer                   | Central | Fairfield | Lancaster    |
| Hite Air Conditioning & Refrigeration Inc   | geothermal                                  | installer                   | Central | Farfield  | Carroll      |
| American Electric Power (AEP)               | biomass, solar, wind                        | electric utility provider   | Central | Franklin  | Columbus     |
| AMETEK Solid State Controls                 | geothermal                                  | power systems               | Central | Franklin  | Columbus     |
| AMP Ohio                                    | biomass, fuel cell, solar, wind             | electric utility provider   | Central | Franklin  | Columbus     |
| Audubon Ohio                                | biomass, fuel cell, geothermal, solar, wind | non-profit                  | Central | Franklin  | Columbus     |
| Baldwin & Sours, Inc.                       | Solar                                       | distributor/supplier        | Central | Franklin  | Columbus     |
| Battelle                                    | biomass, fuel cell, solar, wind             | commercialization           | Central | Franklin  | Columbus     |
| Bedford #1 Landfill                         | biomass                                     | landfill gas                | Central | Franklin  | Columbus     |
| Bedford #2 Landfill                         | biomass                                     | landfill gas                | Central | Franklin  | Columbus     |
| Blue Green Alliance                         | biomass, fuel cell, geothermal, solar, wind | non-profit                  | Central | Franklin  | Columbus     |
| CJ Contracting                              | geothermal                                  | installer                   | Central | Franklin  | Columbus     |
| CJR Group Inc.                              | biomass, fuel cell, geothermal, solar, wind | consulting                  | Central | Franklin  | Columbus     |
| Columbus Micro Systems                      | fuel cell, solar, wind                      | network management          | Central | Franklin  | Columbus     |
| Columbus State Community College            | solar                                       | workforce development       | Central | Franklin  | Columbus     |
| Edison Welding Institute                    | fuel cell, wind                             | welding                     | Central | Franklin  | Columbus     |
| Emerson Liebert - DC-AC inverters           | biomass, fuel cell, geothermal, solar, wind | energy solutions            | Central | Franklin  | Columbus     |
| Environment Ohio                            | biomass, fuel cell, geothermal, solar, wind | non-profit                  | Central | Franklin  | Columbus     |
| Government Edge                             | wind  | consulting                  | Central | Franklin  | Columbus     |
| Greater Ohio                                | biomass, fuel cell, geothermal, solar, wind | non-profit                  | Central | Franklin  | Columbus     |
| Green Columbus                              | biomass, fuel cell, geothermal, solar, wind | non-profit                  | Central | Franklin  | Columbus     |
| Green Energy Ohio                           | biomass, fuel cell, geothermal, solar, wind | non-profit                  | Central | Franklin  | Columbus     |
| Harrop Industries                           | fuel cell                                   | kilns and dryers            | Central | Franklin  | Columbus     |

| Company                                    | Renewable Energy Sector                     | Service                                | Region  | County   | City            |
|--|---|--|---------|----------|-----------------|
| Howard Industries Inc.                     | fuel cell                                   | chemical processing                    | Central | Franklin | Columbus        |
| Johnson Controls                           | biomass, geothermal, solar, wind            | full service renewable energy provider | Central | Franklin | Columbus        |
| MetaMateria Partners                       | fuel cell, solar                            | electrical conductivity products       | Central | Franklin | Columbus        |
| Mid-Ohio Regional Planning Commission      | biomass, fuel cell, geothermal, solar, wind | non-profit                             | Central | Franklin | Columbus        |
| National Electric Coil Inc                 | biomass, geothermal                         | generator and motor windings           | Central | Franklin | Columbus        |
| Ohio Advanced Energy                       | biomass, fuel cell, geothermal, solar, wind | business trade association             | Central | Franklin | Columbus        |
| Ohio Cast Metals Association               | fuel cell                                   | metal castings                         | Central | Franklin | Columbus        |
| Ohio League of Conservation Voters         | biomass, fuel cell, geothermal, solar, wind | non-profit                             | Central | Franklin | Columbus        |
| Ohio Rural Electric Cooperatives           | biomass, solar, wind                        | electric utility provider              | Central | Franklin | Columbus        |
| Paul Werth Associates                      | biomass, wind                               | consulting                             | Central | Franklin | Columbus        |
| Powur of Citizenre                         | solar                                       | consulting                             | Central | Franklin | Columbus        |
| Renewable Concepts and Design, LLC         | geothermal, solar                           | full service renewable energy provider | Central | Franklin | Columbus        |
| SCI Engineered Materials                   | fuel cell                                   | ceramic and metal components           | Central | Franklin | Columbus        |
| Simply Living                              | biomass, fuel cell, geothermal, solar, wind | non-profit                             | Central | Franklin | Columbus        |
| Taratec Corporation                        | fuel cell                                   | commercialization                      | Central | Franklin | Columbus        |
| The Ohio Environmental Council             | biomass, fuel cell, geothermal, solar, wind | non-profit                             | Central | Franklin | Columbus        |
| The Ohio State University                  | biomass, fuel cell, geothermal, solar, wind | education, research and development    | Central | Franklin | Columbus        |
| The Sierra Club                            | biomass, fuel cell, geothermal, solar, wind | non-profit                             | Central | Franklin | Columbus        |
| Tipping Point Renewable Energy             | Solar                                       | full service renewable energy provider | Central | Franklin | Columbus        |
| Tom Fries Associates                       | biomass, fuel cell, geothermal, solar, wind | consulting                             | Central | Franklin | Columbus        |
| University Clean Energy Alliance of Ohio   | biomass, fuel cell, geothermal, solar, wind | education                              | Central | Franklin | Columbus        |
| Watt Works                                 | geothermal, solar                           | full service renewable energy provider | Central | Franklin | Columbus        |
| Environmental Defense Fund (The CJR Group) | biomass, fuel cell, geothermal, solar, wind | non-profit                             | Central | Franklin | Columbus        |
| The National Wildlife Federation           | biomass, fuel cell, geothermal, solar, wind | non-profit                             | Central | Franklin | Columbus        |
| IBEW Training Facility                     | solar, wind                                 | workforce development                  | Central | Franklin | Columbus        |
| DJW Technology                             | fuel cell                                   | research and development               | Central | Franklin | Dublin          |
| Guild Associates, Inc.                     | biomass                                     | adsorption systems                     | Central | Franklin | Dublin          |
| Chembar                                    | fuel cell                                   | distributor/supplier                   | Central | Franklin | Gahanna         |
| Advance Industrial Manufacturing, Inc.     | wind  | structural metal                       | Central | Franklin | Grove City      |
| Franklin County Sanitary Landfill          | biomass                                     | landfill gas                           | Central | Franklin | Grove City      |
| Ohio Semitronics, Inc.                     | wind  | power measurement equipment            | Central | Franklin | Hilliard        |
| OTB USA                                    | solar                                       | inline production equipment            | Central | Franklin | Hilliard        |
| EnviroQuest Energy Solutions               | geothermal                                  | consulting                             | Central | Franklin | Reynoldsburg    |
| AltE                                       | solar, wind                                 | distributor/supplier                   | Central | Franklin | Upper Arlington |
| Energy Designs LLC                         | Solar                                       | education                              | Central | Franklin | Westerville     |
| Lake Shore Cryotronics                     | fuel cell, solar                            | temperature control products           | Central | Franklin | Westerville     |
| National Groundwater Association           | geothermal                                  | trade association                      | Central | Franklin | Westerville     |
| Polymer Ohio Inc.                          | fuel cell, wind                             | trade association                      | Central | Franklin | Westerville     |
| Kenyon College                             | biomass, fuel cell, geothermal, solar, wind | education                              | Central | Knox     | Gambier         |
| Blight to Bright                           | solar                                       | project developer                      | Central | Knox     | Mt. Vernon      |

| Company  | Renewable Energy Sector                     | Service  | Region                        | County   | City  |
|--|---|--|-------------------------------|--|---|
| Champion-Air                                   | geothermal                                  | installer                                      | Central                       | Knox   | Mt. Vernon  |
| Cosby Heating & Cooling                        | geothermal                                  | installer                                      | Central                       | Knox   | Mt. Vernon  |
| Replex Plastics                                | wind, solar                                 | plastic products, research and development     | Central                       | Knox   | Mt. Vernon  |
| Davi American                                  | wind  | wind towers                                    | Central                       | Licking  | Granville   |
| Denison University                             | biomass, fuel cell, geothermal, solar, wind | education                                      | Central                       | Licking  | Granville   |
| Elite Heating and Cooling Inc.                 | geothermal                                  | installer                                      | Central                       | Licking  | Pataskala   |
| Glenn Electric, Inc.                           | solar                                       | electrical contractor                          | Central                       | Licking  | Pataskala   |
| C-Tec: Career and Technology Education Centers | biomass, fuel cell, geothermal, solar, wind | education                                      | Central                       | Licking  | Newark  |
| Greens Solar Solutions, Inc.                   | Solar                                       | full service renewable energy provider         | Central                       | Madison  | London  |
| Geo Source One, Inc.                           | geothermal                                  | installer                                      | Central                       | Madison  | Plain City  |
| Velocys  | fuel cell                                   | commercialization                              | Central                       | Madison  | Plain City  |
| West Jefferson Plumbing and Heating            | geothermal                                  | installer                                      | Central                       | Madison  | West Jefferson  |
| Geothermal By Wenigs                           | geothermal                                  | installer                                      | Central                       | Marion   | Marion  |
| HPM America                                    | wind  | fabricating and machining                      | Central                       | Morrow   | Mount Gilead  |
| Quadrant Insurance Managers                    | wind  | insurance services                             | Central                       | Franklin   | Columbus  |
| Danco Enterprises Inc                          | geothermal                                  | installer                                      | Central, Northeast            | Clark, Geauga  | Springfield, South Russell  |
| PPG Industries                                 | solar, wind                                 | glass and fiberglass products                  | Central, Northeast, Northwest | Franklin, Delaware, Summit, Cuyahoga, Crawford                   | Columbus, Delaware, Barberton, Cleveland, Euclid, Strongsville, Crestline |
| Parker Hannifin                                | wind  | motion control technologies                    | Central, Northeast, Northwest | Union, Cuyahoga, Fulton  | Marysville, Cleveland, Metamora   |
| Bricker & Eckler                               | biomass, fuel cell, geothermal, solar, wind | legal services                                 | Central, Northeast, Southwest | Franklin, Cuyahoga, Hamilton                                     | Columbus, Cleveland, Cincinnati   |
| Squire, Sanders & Dempsey L.L.P.               | wind  | legal services                                 | Central, Northeast, Southwest | Franklin, Cuyahoga, Hamilton                                     | Columbus, Cleveland, Cincinnati   |
| Bodycote Thermal Processing                    | wind  | thermal processing                             | Central, Northeast, Southwest | Madison, Cuyahoga, Hamilton                                      | London, Highland Heights, Cincinnati                                      |
| Owens Corning                                  | solar, wind                                 | building materials and composites              | Central, Northwest            | Licking, Lucas   | Granville, Toledo   |
| SSOE Architects and Engineers                  | fuel cell                                   | architecture and engineering                   | Central, Northwest, Southwest | Franklin, Allen, Lucas, Hamilton                                 | Columbus, Lima, Toledo, Cincinnati  |
| Crown Equipment                                | biomass, geothermal, fuel cell, solar, wind | lift trucks                                    | Central, Northwest, Southwest | Franklin, Licking, Mercer, Auglaize, Lucas, Hamilton, Montgomery | Columbus, Newark, Celina, New Bremen, Toledo, Cincinnati, Dayton          |
| Vanner Inc                                     | fuel cell, solar, wind                      | power solutions                                | Central, Southwest            | Franklin, Montgomery   | Hilliard, Dayton  |
| Duke Energy                                    | biomass, solar, wind                        | electric utility provider                      | Central, Southwest            | Franklin, Clermont, Hamilton, Butler                             | multiple  |
| Ashland Comfort Control                        | geothermal                                  | installer                                      | Northeast                     | Ashland  | Ashland   |
| Molded Fiber Glass Companies                   | solar, wind                                 | composites                                     | Northeast                     | Ashtabula  | Ashtabula   |
| Hadlock Plastics Corporation                   | fuel cell                                   | composite plastics                             | Northeast                     | Ashtabula  | Geneva  |
| LeBeau Geothermal Heating and Cooling          | geothermal                                  | installer                                      | Northeast                     | Carroll  | Malvern   |
| Kentak Products Co.                            | wind  | construction                                   | Northeast                     | Columbiana   | East Liverpool  |
| Cardinal Fastener & Speciality Co., Inc.       | wind  | bolts  | Northeast                     | Cuyahoga   | Bedford Heights   |
| Olympic Steel Co.                              | wind  | metal components                               | Northeast                     | Cuyahoga   | Bedford Heights   |
| Precision Machined Products Assoc.             | biomass, fuel cell, geothermal, solar, wind | trade association                              | Northeast                     | Cuyahoga   | Brecksville   |
| Avalon Precision Casting Co                    | wind  | metal castings                                 | Northeast                     | Cuyahoga   | Brookpark   |
| Graphite Sales                                 | fuel cell                                   | graphite components                            | Northeast                     | Cuyahoga   | Chagrin Falls   |
| ZOOK Enterprises                               | fuel cell                                   | rupture disks                                  | Northeast                     | Cuyahoga   | Chagrin Falls   |
| 24plug, Inc.                                   | fuel cell                                   | custom designed computer software and hardware | Northeast                     | Cuyahoga   | Cleveland   |

| Company                                     | Renewable Energy Sector                     | Service                                | Region    | County   | City      |
|---|---|--|-----------|----------|-----------|
| 5iTech, LLC                                 | fuel cell                                   | commercialization                      | Northeast | Cuyahoga | Cleveland |
| Acorn Technology Group                      | wind  | switches and switchgear                | Northeast | Cuyahoga | Cleveland |
| Advance Manufacturing Corporation           | wind  | fabricating and machining              | Northeast | Cuyahoga | Cleveland |
| ALL Crane Rental Corp.                      | wind  | crane sales and rentals                | Northeast | Cuyahoga | Cleveland |
| American Tank & Fabricating                 | wind  | turbine towers                         | Northeast | Cuyahoga | Cleveland |
| Applied Industrial Technologies             | wind  | distributor/supplier                   | Northeast | Cuyahoga | Cleveland |
| AZ Renewable Energy                         | wind  | distributor/supplier                   | Northeast | Cuyahoga | Cleveland |
| Barth Industries, Inc.                      | wind  | fabricating and machining              | Northeast | Cuyahoga | Cleveland |
| Beverage Machine & Fabricators, Inc.        | wind  | fabricating and machining              | Northeast | Cuyahoga | Cleveland |
| Case Western Reserve University             | biomass, fuel cell, geothermal, solar, wind | education, research and development    | Northeast | Cuyahoga | Cleveland |
| CEC Consultants                             | biomass, geothermal, solar, wind            | consulting                             | Northeast | Cuyahoga | Cleveland |
| Cleveland Gear Company                      | wind  | gears                                  | Northeast | Cuyahoga | Cleveland |
| Cleveland Solar & Wind                      | solar, wind                                 | distributor/supplier                   | Northeast | Cuyahoga | Cleveland |
| Cleveland State University                  | biomass, fuel cell, geothermal, solar, wind | education, research and development    | Northeast | Cuyahoga | Cleveland |
| CSA America Inc.                            | fuel cell                                   | standards writing                      | Northeast | Cuyahoga | Cleveland |
| Dan T. Moore Company                        | wind  | research and development               | Northeast | Cuyahoga | Cleveland |
| Darrah Electric Co Inc                      | wind  | power supplies                         | Northeast | Cuyahoga | Cleveland |
| Dylon Industries, Inc.                      | fuel cell                                   | lubricants                             | Northeast | Cuyahoga | Cleveland |
| Early Stage Partners LP                     | fuel cell                                   | venture capital                        | Northeast | Cuyahoga | Cleveland |
| Earth Day Coalition                         | biomass, fuel cell, geothermal, solar, wind | non-profit                             | Northeast | Cuyahoga | Cleveland |
| Eaton Corporation                           | fuel cell, solar, wind                      | power solutions                        | Northeast | Cuyahoga | Cleveland |
| Ferro                                       | Solar                                       | distributor/supplier                   | Northeast | Cuyahoga | Cleveland |
| FoilTek Inc.                                | solar                                       | solar components                       | Northeast | Cuyahoga | Cleveland |
| Garick Solutions                            | biomass                                     | gas-to-energy systems                  | Northeast | Cuyahoga | Cleveland |
| Garland Company                             | solar                                       | full service renewable energy provider | Northeast | Cuyahoga | Cleveland |
| Great Lakes Institute for Energy Innovation | fuel cell                                   | research and development               | Northeast | Cuyahoga | Cleveland |
| Great Lakes Towing Company                  | wind  | tugboats                               | Northeast | Cuyahoga | Cleveland |
| Great Lakes Wind Network                    | wind  | non-profit: business development       | Northeast | Cuyahoga | Cleveland |
| Green City Blue Lake Institute (at CMNH)    | biomass, fuel cell, geothermal, solar, wind | non-profit                             | Northeast | Cuyahoga | Cleveland |
| HydroGen LLC                                | fuel cell                                   | fuel cell modules                      | Northeast | Cuyahoga | Cleveland |
| IBC Solar Inc.                              | solar                                       | solar modules                          | Northeast | Cuyahoga | Cleveland |
| IBEW Training Facility                      | solar, wind                                 | workforce development                  | Northeast | Cuyahoga | Cleveland |
| Insight Services                            | wind  | oil analysis                           | Northeast | Cuyahoga | Cleveland |
| Jergens, Inc.                               | wind  | fabricating and machining              | Northeast | Cuyahoga | Cleveland |
| Joslyn Hi-Voltage                           | wind  | isolating switches                     | Northeast | Cuyahoga | Cleveland |
| JW Great Lakes Wind                         | biomass, solar, wind                        | full service renewable energy provider | Northeast | Cuyahoga | Cleveland |
| Lincoln Electric Company                    | wind  | distributor/supplier                   | Northeast | Cuyahoga | Cleveland |
| LNE Group                                   | fuel cell, wind                             | consulting                             | Northeast | Cuyahoga | Cleveland |
| Makel Engineering                           | biomass, fuel cell                          | research and development               | Northeast | Cuyahoga | Cleveland |
| Maple Fund                                  | fuel cell                                   | venture capital                        | Northeast | Cuyahoga | Cleveland |
| McMahon DeGulis, llp                        | biomass, fuel cell, geothermal, solar, wind | legal services                         | Northeast | Cuyahoga | Cleveland |
| Mid America Stainless                       | wind  | steel and specialty metals             | Northeast | Cuyahoga | Cleveland |
| Multi Solar Inc.                            | Solar                                       | distributor/supplier                   | Northeast | Cuyahoga | Cleveland |
| NASA Glenn Research Center                  | biomass, fuel cell, geothermal, solar, wind | education, research and development    | Northeast | Cuyahoga | Cleveland |

| Company                                     | Renewable Energy Sector                     | Service                                | Region    | County   | City   |
|---|---|--|-----------|----------|--|
| Natural Resources Defense Council           | biomass, fuel cell, geothermal, solar, wind | non-profit                             | Northeast | Cuyahoga | Cleveland  |
| NorTech                                     | biomass, fuel cell, geothermal, solar, wind | non-profit: business development       | Northeast | Cuyahoga | Cleveland  |
| NPA Coatings                                | wind  | industrial coatings                    | Northeast | Cuyahoga | Cleveland  |
| Ohio Fuel Cell Coalition                    | fuel cell                                   | non-profit: business development       | Northeast | Cuyahoga | Cleveland  |
| Pew Environmental Group                     | biomass, fuel cell, geothermal, solar, wind | non-profit                             | Northeast | Cuyahoga | Cleveland  |
| Phillips Electric                           | wind  | renewable energy developer             | Northeast | Cuyahoga | Cleveland  |
| Policy Matters Ohio                         | biomass, fuel cell, geothermal, solar, wind | non-profit                             | Northeast | Cuyahoga | Cleveland  |
| PPM Instruments                             | fuel cell, wind                             | power supply testing products          | Northeast | Cuyahoga | Cleveland  |
| REPower Solutions                           | Solar, wind                                 | full service renewable energy provider | Northeast | Cuyahoga | Cleveland  |
| Rol-Fab Incorporated                        | wind  | steel fabricating                      | Northeast | Cuyahoga | Cleveland  |
| Sherwin-Williams                            | solar, wind                                 | industrial coatings                    | Northeast | Cuyahoga | Cleveland  |
| Swiger Coil Systems Inc                     | wind  | motors                                 | Northeast | Cuyahoga | Cleveland  |
| System Seals Incorporated                   | wind  | hydraulic seal technologies            | Northeast | Cuyahoga | Cleveland  |
| T & B Foundry Co.                           | wind  | ductile iron castings                  | Northeast | Cuyahoga | Cleveland  |
| Team NEO                                    | fuel cell, wind                             | commercialization                      | Northeast | Cuyahoga | Cleveland  |
| Technology Management Inc.                  | fuel cell                                   | solid oxide fuel cell systems          | Northeast | Cuyahoga | Cleveland  |
| The Freedonia Group                         | biomass, fuel cell, geothermal, solar, wind | research                               | Northeast | Cuyahoga | Cleveland  |
| The Lanly Company                           | fuel cell                                   | heat processing                        | Northeast | Cuyahoga | Cleveland  |
| Torq Hoist Inc.                             | wind  | lifting equipment                      | Northeast | Cuyahoga | Cleveland  |
| United Tool & Gage Company                  | wind  | fabricating and machining              | Northeast | Cuyahoga | Cleveland  |
| Walsh Manufacturing Corporation             | wind  | metal components                       | Northeast | Cuyahoga | Cleveland  |
| WIRE-Net                                    | biomass, fuel cell, geothermal, solar, wind | consulting                             | Northeast | Cuyahoga | Cleveland  |
| WLS Stamping & Fabricating                  | wind  | fabricating and machining              | Northeast | Cuyahoga | Cleveland  |
| Z & Z Manufacturing                         | wind  | hydraulic fittings                     | Northeast | Cuyahoga | Cleveland  |
| Horsburgh & Scott                           | wind  | industrial gears                       | Northeast | Cuyahoga | Cleveland, Euclid  |
| Cuyahoga Community College                  | geothermal, solar, wind                     | workforce development                  | Northeast | Cuyahoga | Cleveland, Highland Hills, Parma, Warrensville Heights, Westlake |
| Gibraltar Industries                        | wind  | metal products                         | Northeast | Cuyahoga | Cuyahoga Heights   |
| Powdermet Inc.                              | fuel cell                                   | metal and ceramic products             | Northeast | Cuyahoga | Euclid   |
| Avtron Industrial Automation                | fuel cell                                   | power testing products                 | Northeast | Cuyahoga | Independence   |
| Five Star Technologies                      | Solar                                       | dispersions, inks and pastes           | Northeast | Cuyahoga | Independence   |
| Norton Environmental Equipment Company, Ltd | biomass                                     | composting systems                     | Northeast | Cuyahoga | Independence   |
| Martindale Electric Co.                     | wind  | tools                                  | Northeast | Cuyahoga | Lakewood   |
| Preformed Line Products                     | wind  | lines and cables                       | Northeast | Cuyahoga | Mayfield Village   |
| R&M Materials Handling Inc.                 | wind  | wind farm operations and maintenance   | Northeast | Cuyahoga | North Olmsted  |
| Laszeray Technology, Inc.                   | fuel cell                                   | fuel cell components                   | Northeast | Cuyahoga | North Royalton   |
| Nautica Windpower LLC                       | wind  | wind energy developer                  | Northeast | Cuyahoga | Olmsted Falls  |
| Echos Air, Inc                              | geothermal                                  | installer                              | Northeast | Cuyahoga | Parma  |
| GrafTech                                    | fuel cell, solar                            | graphite components                    | Northeast | Cuyahoga | Parma  |
| Cuyahoga Regional Sanitary Landfill         | biomass                                     | landfill gas                           | Northeast | Cuyahoga | Solon  |
| ERICO Inc.                                  | solar, wind                                 | electrical products                    | Northeast | Cuyahoga | Solon  |
| Swagelok                                    | fuel cell, geothermal, solar                | fluid systems technologies             | Northeast | Cuyahoga | Solon  |
| TruSeal Technologies, Inc.                  | Solar                                       | insulating glass                       | Northeast | Cuyahoga | Solon  |
| Zircoa, Inc                                 | fuel cell                                   | refractories and ceramics              | Northeast | Cuyahoga | Solon  |

| Company                                      | Renewable Energy Sector                     | Service                                | Region    | County       | City                  |
|--|---|--|-----------|--------------|-----------------------|
| Koyo Corporation of USA                      | wind  | bearings                               | Northeast | Cuyahoga     | Westlake              |
| Nordson                                      | fuel cell, solar                            | adhesive, sealant, coatings systems    | Northeast | Cuyahoga     | Westlake              |
| Solar Lighting and Roofing Systems, Inc.     | Solar                                       | installer                              | Northeast | Cuyahoga     | Westlake              |
| Timcal Graphite and Carbon                   | fuel cell                                   | graphite and carbon products           | Northeast | Cuyahoga     | Westlake              |
| EGC Enterprises Inc.                         | wind  | fluid sealing products                 | Northeast | Geauga       | Chardon               |
| Old State Technologies                       | Solar, wind                                 | full service renewable energy provider | Northeast | Geauga       | Chardon               |
| CAS Data Loggers                             | biomass, fuel cell, geothermal, solar, wind | data logging systems                   | Northeast | Geauga       | Chesterland           |
| Advanced Materials & Processes International | fuel cell                                   | trade association                      | Northeast | Geauga       | Materials Park        |
| Geothermal Professionals                     | geothermal                                  | installer                              | Northeast | Geauga       | South Russell         |
| ALD group LLC                                | wind  | precision machining                    | Northeast | Lake         | Eastlake              |
| MRD Solutions LLC                            | wind  | fabricating and machining              | Northeast | Lake         | Eastlake              |
| PolarCell - SKRL                             | fuel cell                                   | cast and molded parts                  | Northeast | Lake         | Eastlake              |
| Renaissance Group                            | solar, wind                                 | full service renewable energy provider | Northeast | Lake         | Kirtland              |
| Chemsultants International                   | fuel cell                                   | research and development               | Northeast | Lake         | Mentor                |
| Enterprise Welding & Fabricating, Inc.       | fuel cell, solar, wind                      | production line parts                  | Northeast | Lake         | Mentor                |
| GBSA, Inc.                                   | wind  | rotary seals                           | Northeast | Lake         | Mentor                |
| Dyson Corporation                            | wind  | fasteners and forgeings                | Northeast | Lake         | Painesville           |
| Genesis Lamp Corporation                     | solar, wind                                 | distributor/supplier                   | Northeast | Lake         | Painesville           |
| Lake County Landfill                         | biomass                                     | landfill gas                           | Northeast | Lake         | Painesville           |
| Pemery (Ashlawn Group)                       | fuel cell                                   | fuel cell modules                      | Northeast | Lake         | Painesville           |
| Pemery Corporation                           | fuel cell                                   | research and development               | Northeast | Lake         | Painesville           |
| Lubrizol Advanced Materials, Inc.            | wind  | industrial lubricants                  | Northeast | Lake         | Wickliffe             |
| DAI Ceramics                                 | fuel cell                                   | ceramic cores                          | Northeast | Lake         | Willoughby            |
| Federal Gear                                 | wind  | gears and bearings                     | Northeast | Lake         | Willoughby            |
| Norbar Torque Tools, Inc                     | wind  | torque tools                           | Northeast | Lake         | Willoughby            |
| Pacific Fuel Cell Corp.                      | fuel cell                                   | fuel cell components                   | Northeast | Lake         | Willoughby            |
| Weiss North America, Inc.                    | wind  | assembly components                    | Northeast | Lake         | Willoughby            |
| Grace Geothermal Inc.                        | geothermal                                  | installer                              | Northeast | Lake, Geauga | Painesville, Thompson |
| Avon Bearings Corp                           | wind  | bearings                               | Northeast | Lorain       | Avon                  |
| Clyde Industrial, LLC                        | wind  | construction and maintenance           | Northeast | Lorain       | Avon                  |
| Kaydon Corporation                           | wind  | fabricating and machining              | Northeast | Lorain       | Avon                  |
| PolyOne Corp                                 | fuel cell, solar, wind                      | polymers                               | Northeast | Lorain       | Avon Lake             |
| Joe Mescan Windmill                          | wind  | distributor/supplier                   | Northeast | Lorain       | Columbia Station      |
| Nelson Stud Welding Inc.                     | wind  | fasteners                              | Northeast | Lorain       | Elyria                |
| Kalt Manufacturing                           | fuel cell, wind                             | machining                              | Northeast | Lorain       | North Ridgeville      |
| Technology Business Development LLC          | biomass                                     | research and development               | Northeast | Lorain       | North Ridgeville      |
| Lorain County II Landfill                    | biomass                                     | landfill gas                           | Northeast | Lorain       | Oberlin               |
| Oberlin College                              | biomass, fuel cell, geothermal, solar, wind | education, research and development    | Northeast | Lorain       | Oberlin               |
| G & C Quality Air Care, Inc                  | geothermal                                  | service                                | Northeast | Lorain       | Vermilion             |
| Ohio Windmill Manufacturing Co. LLC          | wind  | windmills                              | Northeast | Mahoning     | Berlin Center         |
| Carbon Limestone LF                          | biomass                                     | landfill gas                           | Northeast | Mahoning     | Lowellville           |
| O'Brock Windmill Distributors                | wind  | installer                              | Northeast | Mahoning     | North Benton          |
| Refractory Specialties                       | fuel cell                                   | industrial insulation                  | Northeast | Mahoning     | Sebring               |
| Brillex Industries                           | wind  | fabricating and machining              | Northeast | Mahoning     | Youngstown            |

| Company   | Renewable Energy Sector                     | Service                                     | Region    | County   | City           |
|---|---|---|-----------|----------|----------------|
| Vogelsang   | biomass                                     | pumps                                       | Northeast | Portage  | Ravenna        |
| Adena Corporation   | solar, wind                                 | general contractor                          | Northeast | Richland | Mansfield      |
| American Tower Co.  | wind  | communication towers                        | Northeast | Richland | Shelby         |
| Energy Technologies Inc.  | fuel cell, solar, wind                      | fuel cell components                        | Northeast | Richland | Mansfield      |
| F Squared Laboratories  | fuel cell                                   | testing services                            | Northeast | Richland | Mansfield      |
| Hyundai Ideal Electric Company                                      | wind  | motors and generators                       | Northeast | Richland | Mansfield      |
| IBEW Training Facility  | wind  | workforce development                       | Northeast | Richland | Mansfield      |
| Jackson and sons Drilling and Pump Co.                              | geothermal                                  | geothermal drilling                         | Northeast | Richland | Belleville     |
| KCA Geothermal Services Inc   | geothermal                                  | distributor/supplier                        | Northeast | Richland | Mansfield      |
| Mansfield Industries, Inc.  | fuel cell                                   | fabricating and machining                   | Northeast | Richland | Mansfield      |
| Michael Byrne Manufacturing Co., Inc                                | wind  | earth boring equipment                      | Northeast | Richland | Mansfield      |
| Tyco Electronics Corp   | biomass, fuel cell, geothermal, solar, wind | electrical components                       | Northeast | Richland | Mansfield      |
| 3-D Service   | wind  | repair and maintenance                      | Northeast | Stark    | Massillon      |
| A Better Focus Co.  | Solar                                       | concentrating solar dishes                  | Northeast | Stark    | Massillon      |
| Canton Drop Forge   | wind  | large gear blanks                           | Northeast | Stark    | Canton         |
| COT-PURITECH Wind LLC   | wind  | gearbox services and repair                 | Northeast | Stark    | Canton         |
| Crown Heating & Cooling   | geothermal                                  | installer                                   | Northeast | Stark    | Alliance       |
| Custom Solar Works  | Solar                                       | distributor/supplier                        | Northeast | Stark    | Massillon      |
| Gaspar Inc.   | wind  | fabricating and welding                     | Northeast | Stark    | Canton         |
| Graco Ohio  | fuel cell, wind                             | fluid control                               | Northeast | Stark    | Canton         |
| King Machine & Tool Co.   | wind  | fabricating and machining                   | Northeast | Stark    | Massillon      |
| Magnetech Industrial Services                                       | wind  | gearbox services and repair                 | Northeast | Stark    | Massillon      |
| Midwest Industrial Supply Inc.                                      | wind  | wind farm operations and maintenance        | Northeast | Stark    | Canton         |
| Myers Power Products  | fuel cell                                   | power inverters                             | Northeast | Stark    | Massillon      |
| Polymer Packaging Inc.  | fuel cell                                   | polymer products                            | Northeast | Stark    | Canton         |
| Power Systems Development (PSD)                                     | wind  | high voltage electrical substation projects | Northeast | Stark    | Canton         |
| Renewable Lubricants, Inc   | biomass                                     | bio-based lubricants                        | Northeast | Stark    | Hartville      |
| Rolls-Royce Fuel Cell Systems                                       | fuel cell                                   | fuel cell systems and components            | Northeast | Stark    | Canton         |
| Schalmo Builders  | geothermal                                  | contractor                                  | Northeast | Stark    | Canal Fulton   |
| Sunlight Energy Systems   | solar                                       | distributor/supplier                        | Northeast | Stark    | North Lawrence |
| Timken Co   | wind  | fabricating and machining                   | Northeast | Stark    | Canton         |
| Wind Turbines of Ohio, LLC.   | wind  | full service renewable energy provider      | Northeast | Stark    | Alliance       |
| Acuren Materials Engineering & Testing                              | wind  | engineering                                 | Northeast | Summit   | Akron          |
| Advanced Material and Technology Commercialization                  | fuel cell                                   | commercialization                           | Northeast | Summit   | Akron          |
| Aggreko LLC   | biomass, fuel cell, geothermal, solar, wind | generator rentals                           | Northeast | Summit   | Tallmadge      |
| Akron Machine Services Inc.   | wind  | machining                                   | Northeast | Summit   | Akron          |
| ALL Aerials, LLC  | wind  | crane sales and rentals                     | Northeast | Summit   | Richfield      |
| ALT Sales Corp.   | wind  | crane sales and rentals                     | Northeast | Summit   | Richfield      |
| Century Heating and Cooling, LLC                                    | geothermal                                  | installer                                   | Northeast | Summit   | Sagamore Hills |
| Cleveland Electric Laboratories                                     | wind  | engineering and planning                    | Northeast | Summit   | Twinsburg      |
| First Energy (Ohio Edison, Toledo Edison, The Illuminating Company) | biomass, solar, wind                        | electric utility provider                   | Northeast | Summit   | Akron          |
| Glebus Alloys LLC USA   | wind  | bearings                                    | Northeast | Summit   | Akron          |
| Green Energy Technologies   | wind  | full service renewable energy provider      | Northeast | Summit   | Akron          |

| Company                               | Renewable Energy Sector                     | Service  | Region               | County                   | City                           |
|---------------------------------------|---|--|----------------------|--------------------------|--------------------------------|
| IBEW Training Facility                | solar, wind                                 | workforce development                                      | Northeast            | Summit                   | Akron                          |
| Jennings Heating                      | geothermal, solar                           | installer  | Northeast            | Summit                   | Akron                          |
| KB Compost Services, Inc.             | biomass                                     | biosolids management                                       | Northeast            | Summit                   | Akron                          |
| Metal Improvement Company             | wind  | metal treatment  | Northeast            | Summit                   | Twinsburg                      |
| Middleton Geothermal Services         | geothermal                                  | full service renewable energy provider                     | Northeast            | Summit                   | Akron                          |
| Mirka Abrasives                       | wind  | construction   | Northeast            | Summit                   | Twinsburg                      |
| Parker Fabricating Co.                | wind  | steel fabricating  | Northeast            | Summit                   | Akron                          |
| Pier Associates, Inc.                 | geothermal                                  | sales and service  | Northeast            | Summit                   | Akron                          |
| Plastech Consulting, Inc.             | fuel cell                                   | consulting   | Northeast            | Summit                   | Tallmadge                      |
| PSL of America                        | wind  | bearings   | Northeast            | Summit                   | Twinsburg                      |
| Rexource Thermionics                  | solar, wind, geothermal                     | manufacturing  | Northeast            | Summit                   | Akron                          |
| SSP Fittings                          | fuel cell                                   | fluid systems technologies                                 | Northeast            | Summit                   | Twinsburg                      |
| Today's Energy Solutions              | wind  | advertising and marketing                                  | Northeast            | Summit                   | Richfield                      |
| University of Akron                   | biomass, fuel cell, geothermal, solar, wind | education, research and development                        | Northeast            | Summit                   | Akron                          |
| Wright Tool                           | wind  | tools  | Northeast            | Summit                   | Barberton                      |
| YXLON International Feinfocus Inc.    | fuel cell                                   | material testing   | Northeast            | Summit                   | Mogadore                       |
| Wellman Products                      | fuel cell                                   | fabricating and machining                                  | Northeast            | Summit, Medina, Cuyahoga | Akron, Medina, Solon           |
| Ellwood Engineered Castings           | wind  | metal castings   | Northeast            | Trumbull                 | Hubbard                        |
| IBEW Training Facility                | geothermal, solar, wind                     | workforce development                                      | Northeast            | Trumbull                 | Warren                         |
| Technical Staffing Professionals LLC  | fuel cell                                   | staffing   | Northeast            | Trumbull                 | Warren                         |
| Thermatex Corporation                 | fuel cell, wind                             | insulating products  | Northeast            | Trumbull                 | Newton Falls                   |
| Valley Electrical Consolidated Inc    | solar, wind                                 | renewable energy developer                                 | Northeast            | Trumbull                 | Girard                         |
| Geo-Hydro Supply LTD                  | geothermal                                  | distributor/supplier                                       | Northeast            | Tuscarawas               | Sugarcreek                     |
| Harris Battery                        | wind  | battery supplier   | Northeast            | Tuscarawas               | Bolivar                        |
| Icykx                                 | geothermal                                  | installer  | Northeast            | Tuscarawas               | Sugarcreek                     |
| Simpson Heating and Cooling           | geothermal                                  | installer  | Northeast            | Tuscarawas               | Dover                          |
| Windharness Development Corp.         | wind  | wind energy developer                                      | Northeast            | Tuscarawas               | Dennison                       |
| Yoder Drilling and Geothermal         | geothermal                                  | installer  | Northeast            | Tuscarawas               | Sugarcreek                     |
| First Geothermal Energy               | geothermal                                  | installer  | Northeast            | Wayne                    | Wooster                        |
| Heat Exchange Applied Technology, Inc | fuel cell                                   | heat exchangers  | Northeast            | Wayne                    | Orville                        |
| Schmack Bioenergy                     | biomass                                     | full service waste management and renewable energy company | Northeast            | Wayne, Cuyahoga          | Wooster, Cleveland             |
| Parker Hannifin                       | wind  | motion control technologies                                | Northeast, Northwest | Cuyahoga, Fulton         | Cleveland, Metamora            |
| Barnes Group, Inc.                    | fuel cell                                   | components   | Northeast, Northwest | Cuyahoga, Lucas          | Brecksville, Cleveland, Maumee |
| Ww Heating And Air Conditioning       | geothermal                                  | installer  | Northwest            | Allen                    | Lima                           |
| Gagel Plumbing and Heating            | geothermal                                  | installer  | Northwest            | Auglaize                 | Minster                        |
| Minster Machine Company               | wind  | fabricating and machining                                  | Northwest            | Auglaize                 | Minster                        |
| Engineered Process Systems, LTD       | Solar, wind                                 | full service renewable energy provider                     | Northwest            | Erie                     | Huron                          |
| Hohler Sheet Metal                    | geothermal                                  | installer  | Northwest            | Erie                     | Huron, Sandusky                |
| Tomich Heating & Air                  | geothermal                                  | installer  | Northwest            | Erie                     | Sandusky                       |
| Greensleeves, LLC.                    | geothermal                                  | installer  | Northwest            | Hancock                  | Findlay                        |
| Owens Community College               | biomass, fuel cell, geothermal, solar, wind | workforce development                                      | Northwest            | Hancock, Lucas, Wood     | Findlay, Toledo, Perysburg     |
| AFCO Precision Manufacturing Co.      | wind  | metal fabrication equipment                                | Northwest            | Henry                    | Napoleon                       |

| Company                              | Renewable Energy Sector                     | Service                                | Region               | County                  | City                     |
|--------------------------------------|---|--|----------------------|-------------------------|--------------------------|
| Graebener Group Technologies         | wind  | metal fabrication equipment            | Northwest            | Henry                   | Napoleon                 |
| Bio-Gas, Ltd.                        | biomass                                     | gas-to-energy systems                  | Northwest            | Huron                   | Norwalk                  |
| M & S Equipment Inc                  | geothermal                                  | distributor/supplier                   | Northwest            | Huron                   | Wakeman                  |
| Norwalk Concrete Industries          | wind  | precast concrete products              | Northwest            | Huron                   | Norwalk                  |
| St. George's Renewable Energies      | wind  | wind energy developer                  | Northwest            | Huron                   | Wakeman                  |
| Advanced Distributed Generation, LLC | solar                                       | full service renewable energy provider | Northwest            | Lucas                   | Toledo                   |
| Alignment Supplies Inc.              | wind  | wind farm operations and maintenance   | Northwest            | Lucas                   | Maumee                   |
| Cooling Technologies, Inc.           | fuel cell, solar, wind                      | temperature control technologies       | Northwest            | Lucas                   | Toledo                   |
| Dana Corporation                     | fuel cell                                   | fuel cell components                   | Northwest            | Lucas                   | Toledo                   |
| Engineering Dynamics                 | wind  | turbine mechanical sub-components      | Northwest            | Lucas                   | Sylvania                 |
| IBEW Training Facility               | solar, wind                                 | workforce development                  | Northwest            | Lucas                   | Toledo                   |
| Innovative Thin Films, LLG           | Solar                                       | venture capital                        | Northwest            | Lucas                   | Toledo                   |
| Maumee Authority Stamping            | wind  | metal and plastic stampings            | Northwest            | Lucas                   | Maumee                   |
| Maumee Valley Fabricators, Inc.      | fuel cell, wind                             | metal fabricating                      | Northwest            | Lucas                   | Toledo                   |
| Midwest Optoelectronics, LLC         | Solar                                       | optoelectronic devices                 | Northwest            | Lucas                   | Toledo                   |
| Midwest Terminals of Toledo          | wind  | ports and terminals                    | Northwest            | Lucas                   | Toledo                   |
| Owens-Illinois, Inc.                 | solar                                       | glass and plastic products             | Northwest            | Lucas                   | Toledo                   |
| University of Toledo                 | biomass, fuel cell, geothermal, solar, wind | education, research and development    | Northwest            | Lucas                   | Toledo                   |
| W. Drescher & Associates             | wind  | legal services                         | Northwest            | Lucas                   | Sylvania                 |
| Willard & Kelsey Solar Group LLC     | Solar                                       | solar panels                           | Northwest            | Lucas                   | Toledo                   |
| Xunlight Corporation                 | Solar                                       | photovoltaic modules                   | Northwest            | Lucas                   | Toledo                   |
| Fanning Howey                        | solar                                       | architecture and engineering           | Northwest            | Mercer                  | Celina                   |
| Ray's Refrigeration, Inc.            | geothermal                                  | distributor/supplier                   | Northwest            | Mercer                  | Coldwater                |
| Benjamin Company, The                | fuel cell, solar, wind                      | consulting                             | Northwest            | Ottawa                  | Port Clinton, Put-In-Bay |
| North Coast Wind & Power, LLC        | wind  | full service renewable energy provider | Northwest            | Ottawa                  | Port Clinton             |
| Sierra Lobo                          | fuel cell                                   | engineering and technical services     | Northwest            | Sandusky, Erie          | Fremont, Milan           |
| Horizon Wind Energy                  | wind  | wind energy developer                  | Northwest            | Van Wert                | Van Wert                 |
| Iberdrola Renewables                 | solar, wind                                 | renewable energy developer             | Northwest            | Van Wert                |                          |
| Bard Manufacturing Co.               | geothermal                                  | climate control solutions              | Northwest            | Williams                | Bryan                    |
| Argo-Hytos Inc.                      | wind  | fluid technologies                     | Northwest            | Wood                    | Bowling Green            |
| Bowling Green University             | biomass, fuel cell, geothermal, solar, wind | education, research and development    | Northwest            | Wood                    | Bowling Green            |
| Bulk Molding Compounds               | fuel cell                                   | bulk molding compounds                 | Northwest            | Wood                    | Perrysburg               |
| Calyxo USA, Inc.                     | Solar                                       | thin-film modules                      | Northwest            | Wood                    | Perrysburg               |
| First Solar, Inc.                    | Solar                                       | solar power systems                    | Northwest            | Wood                    | Perrysburg               |
| Green by Design                      | geothermal, solar, wind                     | distributor/supplier                   | Northwest            | Wood                    | Bowling Green            |
| MCM Precision Castings               | fuel cell                                   | precision castings                     | Northwest            | Wood                    | Weston                   |
| Pilkington North America             | Solar                                       | glass products                         | Northwest            | Wood                    | Northwood                |
| Stark's Inc.                         | wind  | installer                              | Northwest            | Wood                    | Bowling Green            |
| Techneglas                           | Solar                                       | glass products                         | Northwest            | Wood                    | Perrysburg               |
| United Home Comfort                  | geothermal                                  | installer                              | Northwest            | Wood                    | Bowling Green            |
| Tin Man Heating & Cooling            | geothermal                                  | installer                              | Northwest            | Wood, Hancock           | Bowling Green, Findlay   |
| Marathon Special Products            | wind  | turbine electrical sub-components      | Northwest            | Wood                    | Bowling Green            |
| American Trim                        | fuel cell                                   | metal forming and coating              | Northwest, Southwest | Allen, Auglaize, Shelby | Lima, Wapakoneta, Sidney |
| American Hydrogen                    | fuel cell                                   | ammonia to hydrogen electrolyzer       | Southeast            | Athens                  | Athens                   |

| Company   | Renewable Energy Sector                     | Service                                | Region    | County     | City            |
|---|---|--|-----------|------------|-----------------|
| Hocking College   | biomass, fuel cell, geothermal, solar, wind | education, research and development    | Southeast | Athens     | Nelsonville     |
| Ohio University   | biomass, fuel cell, geothermal, solar, wind | education, research and development    | Southeast | Athens     | Athens          |
| Sunpower, Inc.  | biomass, solar                              | distributor/supplier                   | Southeast | Athens     | Athens          |
| Third Sun Solar & Wind Power Ltd.                       | solar, wind                                 | full service renewable energy provider | Southeast | Athens     | Athens          |
| Rumer Loudin Inc  | geothermal                                  | installer                              | Southeast | Belmont    | Barnesville     |
| M & D Heating & Cooling                                 | geothermal                                  | installer                              | Southeast | Guernsey   | Byesville       |
| Universal Mechanical Company Heating & Air Conditioning | geothermal                                  | installer                              | Southeast | Hocking    | Rockbridge      |
| Evely Solar Products, Inc.                              | Solar                                       | distributor/supplier                   | Southeast | Lawrence   | Rome            |
| Heaberlin Heating & Air Conditioning                    | geothermal                                  | installer                              | Southeast | Lawrence   | East Kitts Hill |
| Inspiramental Col.                                      | solar, wind                                 | full service renewable energy provider | Southeast | Montgomery | Dayton          |
| Federal Heating & Cooling                               | geothermal                                  | installer                              | Southeast | Muskingum  | Dresden         |
| Southern Ohio Mechanical                                | geothermal                                  | installer                              | Southeast | Pike       | Waverly         |
| Shawnee State University                                | biomass, fuel cell, geothermal, solar, wind | education, research and development    | Southeast | Scioto     | Portsmouth      |
| Hudepohl Heating and Air                                | geothermal                                  | installer                              | Southwest | Brown      | Sardinia        |
| Milacron, Inc.  | wind  | fabricating and machining              | Southwest | Brown      | Mt. Orab        |
| Barfield Manufacturing Co.                              | biomass, fuel cell, geothermal, solar, wind | metal products                         | Southwest | Butler     | Hamilton        |
| CMC Utility Products                                    | wind  | aluminum and copper connectors         | Southwest | Butler     | Hamilton        |
| Henry M. Wood Co.                                       | fuel cell                                   | distributor/supplier                   | Southwest | Butler     | West Chester    |
| Miami University  | biomass, fuel cell, geothermal, solar, wind | education, research and development    | Southwest | Butler     | Oxford          |
| Southwest Ohio Geothermal                               | geothermal                                  | installer                              | Southwest | Butler     | Collinsville    |
| ABM Drives, Inc.  | biomass, wind                               | motors and generators                  | Southwest | Clermont   | Milford         |
| Inductive Components Mfg Inc.                           | wind  | voltage regulator controls             | Southwest | Clermont   | Amelia          |
| Melink  | geothermal, solar, wind                     | full service renewable energy provider | Southwest | Clermont   | Milford         |
| Terrasource Geothermal Systems                          | geothermal                                  | distributor/supplier                   | Southwest | Clermont   | Batavia         |
| McGeady Group, LLC                                      | fuel cell                                   | outsource field sales                  | Southwest | Greene     | Spring Valley   |
| Wind Bender Heating and Cooling, Inc                    | geothermal                                  | installer                              | Southwest | Greene     | Jamestown       |
| YSI, Inc.   | fuel cell                                   | environmental monitoring and testing   | Southwest | Greene     | Yellow Springs  |
| Advantech Corporation                                   | fuel cell, solar, wind                      | energy management solutions            | Southwest | Hamilton   | Cincinnati      |
| Arronco Comfort Air                                     | geothermal                                  | installer                              | Southwest | Hamilton   | Cincinnati      |
| BHE Environmental Inc.                                  | wind  | consulting                             | Southwest | Hamilton   | Cincinnati      |
| Blue Chip Solar and Wind                                | solar, wind                                 | installer                              | Southwest | Hamilton   | Cincinnati      |
| Cast-Fab Technologies Inc.                              | wind  | metal casting                          | Southwest | Hamilton   | Cincinnati      |
| Cincinnati State Technical and Community College        | biomass, fuel cell, geothermal, solar, wind | workforce development                  | Southwest | Hamilton   | Cincinnati      |
| Cincinnati Sub-Zero                                     | solar                                       | environmental test chambers            | Southwest | Hamilton   | Cincinnati      |
| Cincinnati Thermal Spray Inc.                           | wind  | industrial coatings                    | Southwest | Hamilton   | Cincinnati      |
| Cognis Corp.  | wind  | industrial coatings                    | Southwest | Hamilton   | Cincinnati      |
| Diversified Design Dynamics                             | wind  | machine and tool assembly and design   | Southwest | Hamilton   | Cincinnati      |
| Future Enviroassets, LLC                                | biomass                                     | consulting                             | Southwest | Hamilton   | Cincinnati      |
| Haeusler AG   | wind  | metal forming machines                 | Southwest | Hamilton   | Cincinnati      |
| IBEW Training Facility                                  | solar                                       | workforce development                  | Southwest | Hamilton   | Cincinnati      |
| ILSCO   | wind  | mechanical connectors                  | Southwest | Hamilton   | Cincinnati      |
| LCP Technology Incorporated                             | fuel cell                                   | chemical solutions                     | Southwest | Hamilton   | Cincinnati      |
| M&B's Battery Company, Inc.                             | wind  | distributor/supplier                   | Southwest | Hamilton   | Harrison        |

| Company  | Renewable Energy Sector                     | Service                                    | Region    | County                     | City       |
|--|---|--|-----------|----------------------------|------------|
| Magna Machine Co.                                  | wind  | fabricating and machining                  | Southwest | Hamilton                   | Cincinnati |
| Marwin Ball Valves, Div. of Richards Industries, I | fuel cell                                   | industrial valves                          | Southwest | Hamilton                   | Cincinnati |
| McSwain Manufacturing, Inc.                        | wind  | fabricating and machining                  | Southwest | Hamilton                   | Cincinnati |
| Performance Plastics Ltd.                          | fuel cell                                   | plastic components                         | Southwest | Hamilton                   | Cincinnati |
| Peter Cremer North America                         | biomass                                     | distributor/supplier                       | Southwest | Hamilton                   | Cincinnati |
| Phase 3 Developments & Investments, LLC            | biomass                                     | commercialization                          | Southwest | Hamilton                   | Cincinnati |
| PIA Group  | fuel cell                                   | fuel cell components                       | Southwest | Hamilton                   | Cincinnati |
| Recker and Boerger, Inc.                           | geothermal                                  | installer                                  | Southwest | Hamilton                   | Cincinnati |
| Star Sailor  | wind  | manufacturer                               | Southwest | Hamilton                   | Cincinnati |
| Sunrock Solar                                      | Solar                                       | full service renewable energy provider     | Southwest | Hamilton                   | Cincinnati |
| TechSolve  | fuel cell                                   | consulting                                 | Southwest | Hamilton                   | Cincinnati |
| ThermalTech Engineering Inc.                       | biomass                                     | engineering                                | Southwest | Hamilton                   | Cincinnati |
| University of Cincinnati                           | biomass, fuel cell, geothermal, solar, wind | education, research and development        | Southwest | Hamilton                   | Cincinnati |
| Western Hills Heating and AC, Inc.                 | geothermal                                  | installer                                  | Southwest | Hamilton                   | Harrison   |
| Woolpert Inc.                                      | wind  | engineering and planning                   | Southwest | Hamilton                   | Cincinnati |
| Zimmer Heating and AC, Inc.                        | geothermal                                  | installer                                  | Southwest | Hamilton                   | Cincinnati |
| KES Electrical Systems, LLC                        | solar                                       | installer                                  | Southwest | Hamilton, Clermont, Warren | Loveland   |
| Hartzell Fan, Inc.                                 | wind  | industrial ventilation                     | Southwest | Miami                      | Piqua      |
| Ohio Green Wind                                    | Solar, wind                                 | full service renewable energy provider     | Southwest | Miami                      | Tipp City  |
| Process Equipment Company                          | wind  | fabricating and machining                  | Southwest | Miami                      | Tipp City  |
| AIDA-America Corp.                                 | wind  | turbine mechanical sub-components          | Southwest | Montgomery                 | Dayton     |
| Allied Services Inc                                | geothermal                                  | installer                                  | Southwest | Montgomery                 | Clayton    |
| Bill Spade Electric Inc.                           | geothermal                                  | installer                                  | Southwest | Montgomery                 | Miamisburg |
| Cornerstone Research Group                         | fuel cell, solar, wind                      | research and development                   | Southwest | Montgomery                 | Dayton     |
| Daychem Laboratories, Inc.                         | fuel cell                                   | specialty chemicals                        | Southwest | Montgomery                 | Vandalia   |
| Dayton Power and Light                             | biomass, solar, wind                        | electric utility provider                  | Southwest | Montgomery                 | Dayton     |
| Dayton Superior Corporation                        | wind  | concrete and masonry construction products | Southwest | Montgomery                 | Dayton     |
| Del-Monde Inc.                                     | geothermal                                  | installer                                  | Southwest | Montgomery                 | Miamisburg |
| DuPont   | fuel cell, geothermal, Solar, wind          | renewable energy components                | Southwest | Montgomery                 | Dayton     |
| EMTEC  | fuel cell, solar, wind                      | non-profit: business development           | Southwest | Montgomery                 | Dayton     |
| Faraday Technology                                 | fuel cell                                   | engineering                                | Southwest | Montgomery                 | Clayton    |
| Harco Industries                                   | fuel cell                                   | hydraulic brake hoses                      | Southwest | Montgomery                 | Dayton     |
| Hohman Plating and Manufacturing, Inc.             | fuel cell                                   | electroplating                             | Southwest | Montgomery                 | Dayton     |
| Mound Technical Solutions                          | fuel cell                                   | research and development                   | Southwest | Montgomery                 | Miamisburg |
| National Methane                                   | biomass                                     | consulting                                 | Southwest | Montgomery                 | Dayton     |
| Precision Energy and Technology                    | fuel cell                                   | fuel cell components                       | Southwest | Montgomery                 | Kettering  |
| Schwark Electrical                                 | Solar, wind                                 | distributor/supplier                       | Southwest | Montgomery                 | Dayton     |
| SIME Corp.   | wind  | braking systems                            | Southwest | Montgomery                 | Dayton     |
| Sinclair Community College                         | biomass, fuel cell, geothermal, solar, wind | workforce development                      | Southwest | Montgomery                 | Dayton     |
| Staco Energy Products Co.                          | wind  | wind farm control equipment                | Southwest | Montgomery                 | Dayton     |
| Thaler Machine Company                             | fuel cell                                   | precision machining                        | Southwest | Montgomery                 | Dayton     |
| The Minco Group                                    | fuel cell                                   | custom plastic molds                       | Southwest | Montgomery                 | Dayton     |
| Tuf-Tug Products /Deuer Developments               | wind  | maintenance                                | Southwest | Montgomery                 | Moraine    |
| UltraCell  | fuel cell                                   | micro fuel cells                           | Southwest | Montgomery                 | Vandalia   |

| Company                           | Renewable Energy Sector                     | Service                             | Region    | County             | City          |
|-----------------------------------|---|-------------------------------------|-----------|--------------------|---------------|
| University of Dayton              | biomass, fuel cell, geothermal, solar, wind | education, research and development | Southwest | Montgomery         | Dayton        |
| Webcore Technologies Inc.         | wind  | composites                          | Southwest | Montgomery         | Miamisburg    |
| Wright State University           | biomass, fuel cell, geothermal, solar, wind | education, research and development | Southwest | Montgomery         | Dayton        |
| CJS Systems Heating & Cooling     | geothermal                                  | installer                           | Southwest | Montgomery, Greene | Dayton, Xenia |
| LP Hoying                         | solar, wind                                 | photovoltaic power supplies         | Southwest | Shelby             | Ft. Loramie   |
| Plug Power                        | fuel cell                                   | fuel cell modules                   | Southwest | Shelby             | Sidney        |
| Azbil-Yamatake Sensing Controls   | fuel cell                                   | measurement and control products    | Southwest | Warren             | Mason         |
| Native Wind Energy                | wind  | consulting                          | Southwest | Warren             | Lebanon       |
| OSG TAP AND DIE, INC.             | wind  | tools                               | Southwest | Warren             | Mason         |
| PhyMet, Inc.                      | fuel cell                                   | industrial lubricants               | Southwest | Warren             | Springboro    |
| Stress Engineering Services, Inc. | solar, wind                                 | consulting                          | Southwest | Warren             | Mason         |