



# Industry Directory for On-Farm Biogas Recovery Systems

March 2012





# INDUSTRY DIRECTORY FOR ON-FARM BIOGAS RECOVERY SYSTEMS

The AgSTAR Program produces this Industry Directory to assist livestock producers and others involved in developing anaerobic digestion systems to identify consultants, designers, developers, equipment vendors, and other providers of biogas energy services.

If you are in the planning stages of a biogas recovery system, we recommend that you use the Industry Directory in combination with the AgSTAR Handbook (which is available on the AgSTAR website at [www.epa.gov/agstar](http://www.epa.gov/agstar)) as project development tools to begin the initial project planning process to increase the potential for success.

**Commodity Organizations** represent the interests of a specific crop or livestock commodity. Commodity organizations generally are involved in marketing or lobbying activities.

**Consultants** provide a variety of services related to biogas recovery systems, including feasibility analyses (e.g., technical, economic, and financial), nutrient management planning, system design, and environmental impact and regulatory assessments.

**Developers** design and install biogas recovery systems for livestock and other industries. In many cases, these are “turn-key” system developers who provide consultant services as part of the development package.

**Financing Specialists** provide loans for biogas projects, funding on-farm biogas systems for profit, and brokering the sale of carbon offsets and renewable energy certificates.

**Energy Service Providers** are independently owned municipal or co-operative electricity or natural gas companies that have an interest in providing biogas energy to customers.

**Manufacturers/Distributors** include entities that manufacture, distribute, and in some cases, install equipment used in biogas recovery systems, including covers, engines, tanks, and other system components.

**Publishers** distribute journals and reports of interest to farm owners and others interested in biogas recovery systems.

**Universities** are educational institutions, including land grant colleges and universities, involved in developing and demonstrating on-farm biogas recovery systems and technologies.

The Directory is not all inclusive. We will update the Directory regularly as we learn of new businesses in the livestock waste market. These updates will be posted on the AgSTAR website, along with other AgSTAR products.

If you wish to be included in the Directory, go to [www.epa.gov/agstar/tools/experts/signup.html](http://www.epa.gov/agstar/tools/experts/signup.html).

If you currently are on the list and want to update any information, go to [www.epa.gov/agstar/contact.html](http://www.epa.gov/agstar/contact.html).

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## Commodity Organizations

### Best Agri-Marketing, Inc.

Todd Soares

3901 S.Mooney Blvd. Suite E

Visalia CA 93277

**Tel:** (559) 733-9777

**Fax:** (559) 733-9774

**Email:** bestagri@aol.com

**Website:** www.bestagrimarketing.com

**Year Established:** 1992

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Bulk cattle feed merchandising company interested in developing environmental issues and resolution department for patrons. Interested in biogas projects.

### Dairy Quality Assurance Center

Keith Carlson

801 Shakespeare Avenue

Stratford IA 50249

**Tel:** (515) 838-2793

**Fax:** (515) 838-2788

**Email:** kcarlson@dqacenter.org

**Website:** www.dqacenter.org

**Year Established:** 1994

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

The Dairy Quality Assurance Center provides national publicity to dairy farmers.

### Missouri Pork Producers Association

Don Nikodim

6235 W. Cunningham Drive

Columbia MO 65202

**Tel:** (573) 445-8375

**Fax:** (573) 446-2398

**Email:** pork@mppa.net

**Website:** www.mppa.net

**Year Established:** 1956

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

The Missouri Pork Producers Association is an organization focused on agricultural commodities.

## Consultants

### Acterra Group, Inc.

Tad Cooper

P.O. Box 160

Marion IA 52302

**Tel:** (800) 289-7371

**Fax:** (319) 377-0075

**Email:** tad@acterragroup.com

**Website:** www.acterragroup.com

**Year Established:** 1958

**# of Farm Projects:** 1

**# of Biogas Projects:** 3

Providing consulting and construction services to the biogas industry.

### Advance Design Consultants, Inc.

Renato O'Neal

998 Park Avenue

San Jose CA 95126

**Tel:** (408) 297-1881

**Fax:** (408) 294-3186

**Email:** renato@adcengineers.com

**Website:** www.adcengineers.com

**Year Established:** 1984

**# of Farm Projects:** N/A

**# of Biogas Projects:** 5

Advance Design Consultants are leaders in the meticulous design and engineering for the public and private sectors. Our dedication to creative problem solving and exemplary client service using "Advance" Technology has made us the trusted and repeated partner of our clients. Our attention to details shows in the fact that we have less than 1% in construction change orders. Since 1984, ADC has been providing not only engineering and detail designs but quality facility surveys, preparation of studies, permitting process cost estimates and construction support services. Our engineers are dedicated to providing the very best design solutions from initial design to final completion to fulfill your company's needs.



## Consultants

### AgRefresh

Patrick Wood  
One Lawson Lane, Suite 110  
Burlington VT 05402-0843

**Tel:** (802) 859-0099  
**Fax:** (802) 261-1011  
**Email:** pwood@agrefresh.org  
**Website:** www.agrefresh.org

**Year Established:** 2003  
**# of Farm Projects:** 15  
**# of Biogas Projects:** 15

AgRefresh provides independent environmental accounting as well as financial and economic analysis services to farms and digester project owners and developers. We advise on project risks, rewards and potential, including revenue generation opportunities in environmental credits (Carbon Offsets and RECs), electricity, biogas, and compost sales, bedding savings, tax credits, and co-digestion tipping fees. Our fee-for-service model enables project owners the opportunity to retain ownership of their offsets in order to achieve the maximum value for the risks they undertake. AgRefresh has supported well over a dozen farms in financing their agricultural AD projects over the past seven years, including assisting project developers in understanding, evaluating, and pursuing carbon market opportunities that will maximize revenue from the earliest stages of project development. In addition, we conduct the independent feasibility analysis required by USDA Grant applications. During these years we've had great success in assisting farms obtain crucial funds from carbon markets and grant resources.

### Agricultural Engineering Associates, Inc.

John A. George, P.E.  
P.O. Box 4  
Uniontown KS 66779

**Tel:** (620) 756-4600  
**Fax:** (620) 756-1000  
**Email:** johng@agengineering.com  
**Website:** www.agengineering.com

**Year Established:** 1974  
**# of Farm Projects:** 20+  
**# of Biogas Projects:** 20+

Broad based engineering firm with 4 decades experience nationally and internationally. Focus is on systems integration, sand separation, manure solids separation, and processing. USDA qualified technical service provided - systems design and CNMP's.

### Agriment Services, Inc.

Geno Kennedy  
P.O. Box 1096  
Beulaville NC 28518

**Tel:** (252) 568-2648  
**Fax:** (252) 568-2750  
**Email:** agrimentservices@yahoo.com  
**Website:** www.agrimentservices.com

**Year Established:** 1994  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Agriment Services, Inc. was founded in 1994 to administer technical assistance to producers as they cope with transition regarding the regulatory process. Agriment Services is a waste management consulting firm prepared to confront the needs of the producer with over 16 years experience in the fields of animal waste management. Since the inception of the company, Agriment Services has assisted hundreds of swine and poultry producers throughout the Midwest, North Carolina and Virginia, with one common goal in mind, "Remaining In Compliance". Agriment Services is on the cutting edge of animal waste management systems.



## Consultants

### Agri-Waste Technology, Inc.

Lawson M. "Mac" Safley, Jr.

5400 Etta Burke Court

Raleigh NC 27606

**Tel:** (919) 859-0669

**Fax:** (919) 233-1970

**Email:** mmottern@agriwaste.com

**Website:** www.agriwaste.com

**Year Established:** 1984

**# of Farm Projects:** 6

**# of Biogas Projects:** 3

Agri-Waste Technology, Inc. (AWT) is a full-service professional engineering and consulting firm, located in Raleigh, North Carolina. For over two decades, AWT has provided environmental services to agricultural, industrial, municipal, and residential clients nationwide. AWT is licensed to provide engineering services in 38 states throughout the country, with a full-time staff consisting of engineers, agronomists, licensed soil scientists, Technical Service Providers (TSP) and GIS/GPS mapping specialists. Over the past several years, AWT has worked effectively with over 350 producers in developing Comprehensive Nutrient Management Plans (CNMPs) for the NRCS in various states. AWT also has specialized experience and technical competence in manure nutrient management, designing, handling, storage, and transfer. AWT has been certified through the Chicago Climate Exchange (CCX) as an approved verifier for greenhouse gas offset projects. AWT has significant experience with digester projects including design specifications, greenhouse gas offsets consulting and carbon credit verifications.

### Applied Technologies, Inc.

Mike O'Neil

16815 W. Wisconsin Avenue

Brookfield WI 53005

**Tel:** (262) 784-7690

**Fax:** (262) 784-6847

**Email:** mponel@ati-ae.com

**Website:** www.ati-ae.com

**Year Established:** 1986

**# of Farm Projects:** 15

**# of Biogas Projects:** 35

Applied Technologies, Inc. (ATI) is an engineering design and consulting firm that has designed numerous anaerobic contact process systems for manure digestion. ATI has also co-sponsored several seminars throughout the last 20 years on the anaerobic treatment of agricultural and high-strength wastes.

### BDS Technologies, Inc.

Taoreed O. Badmus / Freddie Guerra

11325 Pegasus Street, E-200

Dallas TX 75238

**Tel:** (214) 747-2500

**Fax:** (214) 747-2567

**Email:** tbadmus@bdstechnologies.com

**Website:** www.bdstechnologies.com

**Year Established:** 1994

**# of Farm Projects:** N/A

**# of Biogas Projects:** 1

BDS provides turnkey solutions to clients that include feasibility studies, permitting, engineering and design, construction, and start-up of biogas recovery systems.

### BEST, LLC

Craig Frear

645 N. Grand Avenue

Pullman WA 99163

**Tel:** (208) 413-1180

**Fax:** (509) 335-2722

**Email:** king.keving@gmail.com

**Website:** N/A

**Year Established:** 2007

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Provide consultant services related to co-digestion, digester related issues, and nutrient recovery process.



## Consultants

### BioGreen Engineering, LLC

Charlie Ramos

405 Macarthur Drive

Orlando FL 32839

**Tel:** (407) 437-6194

**Fax:** N/A

**Email:** cramos@biogreenengineering.com

**Website:** www.biogreenengineering.com

**Year Established:** 2008

**# of Farm Projects:** 720

**# of Biogas Projects:** 725

BioGreen Engineering is a carbon market company specializing in assisting institutions and companies involved in greenhouse gas emission (GHG) reduction projects with developing, implementing, fine-tuning, and executing business plans to reduce harmful emissions and maximize profitability.

### Brendle Group

Steve Brunner

226 Remington Street, Suite 3

Fort Collins CO 80524

**Tel:** (970) 207-0058

**Fax:** (970) 207-0059

**Email:** sbrunner@brendlegroup.com

**Website:** www.brendlegroup.com

**Year Established:** 1996

**# of Farm Projects:** 15

**# of Biogas Projects:** 20

Brendle Group is an environmentally focused engineering consulting firm that leads by example, inspiring and empowering people to make thoughtful choices about the resources they use and helping them create realistic road maps for sustainability. Founded in Fort Collins, Colorado in 1996, Brendle Group serves clients nationwide, leveraging the strength of what its clients do well with their sincere desire to do more for people, profit, and planet. Brendle Group offers years of experience designing, building, and operating on-farm anaerobic digesters. Expertise includes feedstock analysis, preliminary design, permitting and financing support, design review, and operational guidance. Brendle Group's staff has conducted numerous feasibility studies and performed technical and economic due diligence of European digester technologies.

### Bridgestone Associates, Ltd.

Martin C.T. Anderson

P.O. Box 1299

Chadds Ford PA 19317

**Tel:** (610) 388-6191

**Fax:** (610) 388-0394

**Email:** mcta@brdgstn.com

**Website:** www.brdgstn.com

**Year Established:** 1988

**# of Farm Projects:** 1

**# of Biogas Projects:** 30

Consultants in the evaluation, design, financing, construction and operations of animal manure anaerobic digestion and other disposal facilities and other renewable energy projects.

### Brubaker Consulting Group, Inc.

Michael Brubaker

4340 Oregon Pike

Ephrata PA 17522

**Tel:** (717) 859-3276

**Fax:** (717) 859-3416

**Email:** mikeb@brubakerag.com

**Website:** N/A

**Year Established:** 1979

**# of Farm Projects:** 3

**# of Biogas Projects:** 3

Brubaker Agronomic Consulting consults U.S. farmers in many areas within agriculture, and has three clients with biogas systems: two dairy farms and a swine farm.

### Carbon Solutions America

Alex Hernandez

10 Fairway Drive, #114

Deerfield Beach FL 33441

**Tel:** (561) 953-8960

**Fax:** (561) 953-8961

**Email:** alex@emailcsa.com

**Website:** www.carbonsolutionsamerica.com

**Year Established:** 2006

**# of Farm Projects:** 1

**# of Biogas Projects:** 4

CSA is a climate change consulting company with focus on greenhouse gas reduction offsets. We provide a cradle to grave approach in the commercialization of carbon credits.



## Consultants

### Cavanaugh & Associates

John Bizic

130 N. Front Street, Suite 202

Wilmington NC 28401

**Tel:** (910) 392-4462

**Fax:** (910) 392-4612

**Email:** john.bizic@cavanaughhsolutions.com

**Website:** www.cavanaughhsolutions.com

**Year Established:** 1995

**# of Farm Projects:** 3

**# of Biogas Projects:** 10

Engineering, Utility Services, Surveying, Site Development, Wastewater Treatment, Anaerobic Digestion, etc. and Consulting Services.

### CEM Engineering

Martin Lensink, P.E.

26 Hiscott St. Ste. 201, St. Catharines

Ontario, Canada L24 1C6

**Tel:** (905) 935-5915

**Fax:** (905) 935-7878

**Email:** info@cemeng.ca

**Website:** www.cemeng.ca

**Year Established:** 2001

**# of Farm Projects:** 7

**# of Biogas Projects:** 18

Energy Audits; Proof-of-Concept Assessments (POCA) (both technical & economic); Identification and Implementation of Energy Management Opportunities (EMO's); Sub-metering of gas, power, and thermal use (within load centers); Feasibility Studies (including detailed financial analysis); Capital Cost Estimates; Conceptual and Preliminary Engineering (including high voltage electrical interconnect); Preparation of Design-Build, Turnkey Specifications & Bid Evaluations; Owners-Engineer Services (such as Due Diligence and Fatal Flaw Analysis); Implementation Alternatives (risk/reward, construction, financing, fuel management and procurement); Short-circuit Analysis, Arc Flash Studies, and Protective Device Coordination using the EasyPower® Software.

### Cincas International

Ben Cruz

P.O. Box 81163

San Diego CA 92138

**Tel:** (619) 520-0733

**Fax:** (619) 295-6055

**Email:** bcruz92312@aol.com

**Website:** N/A

**Year Established:** 1978

**# of Farm Projects:** 27

**# of Biogas Projects:** 14

Export technology and equipment to the agro industry of Mexico and others.

### Clean Trade Group (CTG) LLC

Brett Jackson

2020 North 14th Street, Suite 700

Arlington VA 22201

**Tel:** (703) 835-9334

**Fax:** N/A

**Email:** brettj@cleantradegroup.com

**Website:** www.CleanTradeGroup.com

**Year Established:** 2008

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Clean Trade Group (CTG) is a carbon asset consultancy. We work with livestock owners to document, develop, and commercialize offset credits arising from methane avoidance projects.



## Consultants

### Climate Options Group

Charles Brasor

P.O. Box 38378

Baltimore MD 21231

**Tel:** (202) 436-9886

**Fax:** N/A

**Email:** cbrasor@climateoptionsgroup.com

**Website:** www.climateoptionsgroup.com

**Year Established:** 2007

**# of Farm Projects:** 4

**# of Biogas Projects:** N/A

Climate Options Group (COg) is a leading provider of regulatory services for the global emissions market. We offer a diverse range of services including project identification, management, design and engineering. Our services target the mandatory and voluntary markets, which ultimately lead to the generation of carbon credits to be sold in the global markets. COg works closely with companies in both the private and public sectors throughout the developed and the developing world to help find practical, efficient and value-added solutions that mirror environmental expectations of both the present and future. COg staff has over twenty combined years of experience in emission mitigation, project management, and financial markets. They have helped register more than 100 CDM projects globally and have successfully worked with UN certified Designated Operation Entities (DOEs). COg employees have managed projects that have significantly reduced air pollution in the United States via implementation of emission control devices, best management practices, and efficiency improvements at public and private industries throughout the United States. COg staff has successfully negotiated air quality compliance issues and obtained approximately 100 air quality permits from over 20 different Federal, State, and Local regulatory agencies of the United States.

### Coffman Geosciences

Laura E. Coffman, R.G.

2050 East Wayland

Springfield MO 65804

**Tel:** (615) 594-8657

**Fax:** N/A

**Email:** lec56mail-GC@yahoo.com

**Website:** N/A

**Year Established:** 2002

**# of Farm Projects:** 3

**# of Biogas Projects:** 4

Coffman Geosciences provides renewable energy consulting services to agricultural producers, food processors, ethanol developers and other producers of organic waste streams. CG has also patented a novel method for media placement in high-rate, suspended growth anaerobic digestion systems. CG also offers small scale, containerized AD systems to waste producers with smaller operations. Other services offered include AD feasibility studies, system planning and project management.

### Commercial Engineering Corporation - Anergen Division

Ashok Bendre

430 Lake Cook Road, Suite B

Deerfield IL 60015

**Tel:** (847) 236-0900

**Fax:** (847) 236-1790

**Email:** arbend@aol.com

**Website:** www.anergen.com

**Year Established:** 1986

**# of Farm Projects:** N/A

**# of Biogas Projects:** 3

The Anergen Division of Commercial Engineering performs feasibility assessments for farmers interested in installing biogas systems. Anergen submitted several proposals to design and develop biogas systems for farms.

### Conestoga-Rovers & Associates

Jason Haelzle

7086 N. Maple Avenue

Fresno CA 93720

**Tel:** (888) 572-5885

**Fax:** (559) 326-5905

**Email:** jhaelzle@CRAworld.com

**Website:** www.CRAworld.com

**Year Established:** 1976

**# of Farm Projects:** 6

**# of Biogas Projects:** 30

Founded in 1976, Conestoga-Rovers & Associates (CRA) provides comprehensive, multi-disciplinary services in the areas of engineering, environmental consulting, construction and information technology (IT). CRA offers a unique blend of technical expertise and project experience in technology evaluation/assessment and engineering design of anaerobic digestion and biogas collection, upgrading/treatment, and utilization systems for the municipal, agricultural, and food processing sectors. Supporting these areas of endeavor are CRA's considerable experience in landfill gas handling/utilization, waste pretreatment, energy production, municipal waste/wastewater treatment, air emissions, and economic analysis.



## Consultants

### David Bach Electrical Services

David Bach	<b>Tel:</b> (815) 243-2981	<b>Year Established:</b> 1998
3398 E. Edson Road	<b>Fax:</b> N/A	<b># of Farm Projects:</b> 1
Rockford IL 61109	<b>Email:</b> churchtuna@yahoo.com	<b># of Biogas Projects:</b> 1
	<b>Website:</b> N/A	

### Dean Oliver International

Richard Watkins	<b>Tel:</b> (770) 492-2660	<b>Year Established:</b> 1983
4600 North Royal Atlanta Drive	<b>Fax:</b> N/A	<b># of Farm Projects:</b> 12
Tucker GA 30084	<b>Email:</b> Rwatkins@Dean-Oliver.com	<b># of Biogas Projects:</b> 7
	<b>Website:</b> www.Dean-Oliver.com	

Multidiscipline design engineering firm, providing process and detail engineering for industrial plants.

### Dennis Gerber, Consultant

Dennis Gerber	<b>Tel:</b> (408) 395-9020	<b>Year Established:</b> N/A
15870 Rose Avenue	<b>Fax:</b> (408) 395-9020	<b># of Farm Projects:</b> N/A
Los Gatos CA 95030	<b>Email:</b> dhgerber@comcast.net	<b># of Biogas Projects:</b> N/A
	<b>Website:</b> N/A	

Mr. Gerber designs and installs anaerobic digester covers. His Gas Collecting Floating Cover design, which holds a U.S. Patent, is the de-facto standard for flexible membrane anaerobic digesters.

### Digester Consultants

Charlie Ramos	<b>Tel:</b> (407) 459-7806	<b>Year Established:</b> 2009
405 Macarthur Drive	<b>Fax:</b> N/A	<b># of Farm Projects:</b> >600
Orlando FL 32839	<b>Email:</b> cramos@digesterconsultants.com	<b># of Biogas Projects:</b> >600
	<b>Website:</b> www.digesterconsultants.com	

Digester Consultants is a division of BioGreen Engineering, LLC. Consultants focus on providing advice regarding anaerobic digestion plant-process designs and technology. We offer guidance and management of anaerobic digestion operation and maintenance, problem-solving and continuous performance-improvement processes. Our vast anaerobic digestion knowledge enables us to be an immediate benefit to companies by assisting with the assessment, design, construction, start-up, operation, maintenance, and performance improvement of anaerobic digestion systems. We offer complete solutions as well as unbiased assessments and recommendations regarding anaerobic digestion systems. We have the hands-on experience and expertise to analyze and recognize feasible and unfeasible projects and to fine-tune and optimize current and future projects to maximize revenue. No competitor can come close to our extensive hands-on anaerobic digestion experience and expertise. We have developed, operated, maintained, monitored, and responsible for the performance improvement of over 600 anaerobic digestion systems around the world.

### Duke Engineering and Services

David Johnson	<b>Tel:</b> (704) 373-3384	<b>Year Established:</b> 1989
400 S. Tryon Street, P.O. Box 1004	<b>Fax:</b> (704) 382-7669	<b># of Farm Projects:</b> 1
Charlotte NC 28201	<b>Email:</b> rfgreen@dukeengineering.com	<b># of Biogas Projects:</b> 3
	<b>Website:</b> N/A	

Duke Engineering is testing a method to digest manure, and assisted with developing a digester for a poultry farm.



## Consultants

### EA Engineering, P.C.

Christopher J. Kerlish  
3 Washington Center  
Newburgh NY 12550

**Tel:** (845) 565-8100  
**Fax:** (845) 565-8203  
**Email:** info@eaest.com  
**Website:** www.eaest.com

**Year Established:** 1973  
**# of Farm Projects:** 5  
**# of Biogas Projects:** 5

EA Engineering, P.C. is a national environmental engineering and sciences consulting firm with more than 20 offices across the United States. Our headquarters is located in Hunt Valley, Maryland. Within the Northeast Region, EA has 6 offices to service clients. We have a 30-year history of supporting both private and public-sector clients in their pollution prevention, environmental assessment, compliance, restoration, and risk management programs. We have a 30-year project corporate resume spanning a wide range of areas including sludge profiling of anaerobic lagoons, redesigning anaerobic lagoons for waste-to-energy objectives; and landfill investigations, design, and closure.

### ecosur

Timothée Lazaroo  
2 rue Greuze  
Paris France 75116

**Tel:** 33-14-755-0678  
**Fax:** 33-14-505-2702  
**Email:** t.lazaroo@ecosur.fr  
**Website:** www.ecosur.fr

**Year Established:** 2005  
**# of Farm Projects:** 22  
**# of Biogas Projects:** 34

ecosur is a French based company that works in the Kyoto protocol's framework. We develop CDM and JI projects in the sector of methane capture and recovery: LFG (landfill gas flaring) and the AWMS (Animal Waste Management System - biogas combustion). We propose legal, financial and technical expertise to project developers that need to set up the carbon part of their projects and help them to select and implement the appropriate technologies. We help farming activities and local communities to benefit from the carbon credits system to enhance their environmental performances.

### Electrigaz Technologies, Inc.

Eric Camirand  
10301 Ch. Ste-Marguerite, B.7, Troi-Rivieres  
Quebec, Canada G9B 6M6

**Tel:** (819) 687-2875  
**Fax:** (819) 687-2875  
**Email:** eric@electrigaz.com  
**Website:** www.electrigaz.com

**Year Established:** 2001  
**# of Farm Projects:** 100+  
**# of Biogas Projects:** 200+

Electrigaz specializes exclusively in the research and development of biogas solutions, for agricultural producers, industrials, energy developers, plant builders, engineering firms, governments, municipalities and universities.

### Environmental Resource Recovery Group, LLC (EnRRG)

Burt Tribble  
15789 202 Street  
Nortonville KS 66060

**Tel:** (913) 886-8051  
**Fax:** (913) 660-0405  
**Email:** btribble@enrrg.com  
**Website:** www.enrrg.com

**Year Established:** N/A  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Environmental Resource Recovery Group (EnRRG) is a recently formed company whose partners have experience in anaerobic digestion and waste-to-energy in agriculture, agribusiness, and the food industry. EnRRG's business is identifying practical energy recovery, anaerobic digestion, and waste management projects, evaluating their economic potentials, and bringing together qualified projects with development partners. Qualified projects are those meeting technical requirements and economic investment guidelines.



## Consultants

### Fox Engineering Associates, Inc.

Dale Watson  
1601 Golden Aspen Drive  
Ames IA 50010

**Tel:** (515) 233-0000  
**Fax:** (515) 233-0103  
**Email:** [dwatson@foxeng.com](mailto:dwatson@foxeng.com)  
**Website:** [www.foxeng.com](http://www.foxeng.com)

**Year Established:** 1967  
**# of Farm Projects:** 2  
**# of Biogas Projects:** 18

Fox Engineering specializes in environmental and civil engineering services for industrial, municipal, and agricultural sectors. The company focuses on water, wastewater, soil, and air media issues and has designed a digester for Crawford Farm (demonstration project), a swine farm in Nevada, Iowa.

### Future Enviroassets, LLC

Larry Fradkin  
922 Oregon Trail  
Cincinnati OH 45215

**Tel:** (513) 349-3844  
**Fax:** N/A  
**Email:** [lf@futureenviroassets.com](mailto:lf@futureenviroassets.com)  
**Website:** [www.futureenviroassets.com](http://www.futureenviroassets.com)

**Year Established:** N/A  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Future Enviroassets, LLC is an environmental consulting firm with expertise and over 28 years experience in anaerobic digestion.

### GEA Engineering

Steven Gamelsky  
100 Airport Executive Park  
Nanuet NY 10954

**Tel:** (845) 371-5522  
**Fax:** (845) 371-5526  
**Email:** [sgamelsky@geaengineering.com](mailto:sgamelsky@geaengineering.com)  
**Website:** [www.geaengineering.com](http://www.geaengineering.com)

**Year Established:** 1988  
**# of Farm Projects:** 1  
**# of Biogas Projects:** 17

Engineering designers and consultants for anaerobic digestion and cogeneration and fertilizer manufacturing.

### General Bioenergy, Inc.

Phillip Badger  
P.O. Box 26, 3115 Northington  
Florence AL 35630

**Tel:** (256) 740-5634  
**Fax:** (256) 740-5635  
**Email:** [pbadger@bioenergyupdate.com](mailto:pbadger@bioenergyupdate.com)  
**Website:** [www.bioenergyupdate.com](http://www.bioenergyupdate.com)

**Year Established:** 2000  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Mr. Badger is the Technical Director for the Southeastern Regional Biomass Energy Program, which has funded a variety of projects related to farm-scale systems (mainly lagoon digester projects) and wastewater treatment plants. He publishes and sells the "Biogas Utilization Handbook." General Bioenergy has performed feasibility studies for farm biogas systems.

### GeoPacific Lining

William Wolfe  
1300 Dexter Ave., N. #205  
Seattle WA 98109

**Tel:** (206) 284-2378  
**Fax:** (206) 283-7068  
**Email:** [geopacific@cresmont.com](mailto:geopacific@cresmont.com)  
**Website:** N/A

**Year Established:** 1994  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** 2

GeoPacific Lining performs feasibility assessments and consults farms on implementing digester systems, and is in the design phase of developing digesters for three farms in the U.S.



## Consultants

### Hall Associates

Dr. John Martin  
23 Evergreen Drive  
Georgetown DE 19947

**Tel:** (302) 855-0723  
**Fax:** N/A  
**Email:** hallasso@dmv.com  
**Website:** N/A

**Year Established:** 1980  
**# of Farm Projects:** 15+  
**# of Biogas Projects:** 15+

Speciality is independent specialist in third party evaluation of the technical and financial feasibility of biogas projects for animal and food processing wastes.

### Hannover, Ltd.

Don Keysser  
5200 Colonial Drive, Suite 205  
Minneapolis MN 55416-1109

**Tel:** (612) 710-0995  
**Fax:** N/A  
**Email:** don@hannoverconsulting.com  
**Website:** www.hannoverconsulting.com

**Year Established:** 1994  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** 4

Hannover provides business development, project financing, and project coordination services to the alternative energy industry, including assistance in securing capital.

### Hard Hat Services

John Kouba  
940 E. Diehl Road, Suite 150  
Naperville IL 60563

**Tel:** (630) 637-9470  
**Fax:** (630) 637-9471  
**Email:** john.kouba@hardhatinc.com  
**Website:** www.hardhatinc.com

**Year Established:** 2000  
**# of Farm Projects:** 2  
**# of Biogas Projects:** 15

Hard Hat Services is an engineering-construction management firm. Hard Hat Services acquired Kouba Engineering LLC. One of our specialties is anaerobic treatment of high-strength waste, including manure, and biogas to energy projects. We work throughout the USA as well as internationally.

### Kadrmass, Lee and Jackson

Mark Luther  
128 Soo Line Drive  
Bismarck ND 58501

**Tel:** (701) 355-8400  
**Fax:** N/A  
**Email:** mark.luther@kljeng.com  
**Website:** www.kljeng.com

**Year Established:** 1937  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Kadrmass, Lee and Jackson provides alternative and renewable energy solutions through its facilitating, consulting, engineering, and project management services.

### Larsen Engineers

Ram Shrivastava  
700 West Metro Park  
Rochester NY 14623

**Tel:** (585) 272-7310  
**Fax:** (585) 272-0159  
**Email:** info@larsen-engineers.com  
**Website:** www.larsen-engineers.com

**Year Established:** 1955  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Larsen Engineers offers a broad and diverse range of services including civil & environmental engineering, survey, planning and energy conservation and has provided services throughout the northeastern part of the United States. Since the company's inception in 1955, Larsen Engineers has focused on and completed a number of anaerobic digestion, energy conservation/audits, wastewater treatment, site development, and surveying projects. Larsen is interested in saving clients money through sustainable solutions.



## Consultants

### MacMillan & Associates

Roy MacMillan

17815 NE Courtney Road

Newberg OR 97132

**Tel:** (503) 628-0277

**Fax:** N/A

**Email:** rm@macmillan-group.com

**Website:** N/A

**Year Established:** 1973

**# of Farm Projects:** 9

**# of Biogas Projects:** 6

MacMillan & Associates is an integrated engineering and consulting company that specializes in providing energy-related services to the agricultural community.

### Maurer-Stutz, Inc.

Terry L. Feldmann

7615 North Harker Drive

Peoria IL 61615

**Tel:** (309) 693-7615

**Fax:** (309) 693-7616

**Email:** tfeldmann@maurerstutzinc.com

**Website:** www.maurerstutzinc.com

**Year Established:** 1993

**# of Farm Projects:** 7

**# of Biogas Projects:** 7

Maurer-Stutz is a multi-discipline engineering and surveying firm. The firm's agricultural group consists of five agricultural engineers and a certified crop advisor all of whom have experience with livestock and poultry waste handling, treatment and storage systems. Our engineers have performed services for planning and design of methane recovery and/or anaerobic treatment systems including experience with feasibility studies and/or designs for dairy and swine systems. Maurer Stutz has staff specializing in civil, conservation, environmental, geotechnical, structural, transportation and water/wastewater engineering along with CAD design and land surveying to complement our agricultural services.

### MCX Environmental Energy Corp.

Rasheed Mustakeem

3500 Lenox Road, Suite 1500

Atlanta GA 30326

**Tel:** (404) 419-2536

**Fax:** (404) 816-7809

**Email:** rasheed@mcxeec.com

**Website:** www.mcxeec.com

**Year Established:** 1988

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Your distributed energy, infrastructure, and construction management services provider.

### National Methane

William J. Lingo, Sr.

1823 Leo Street

Dayton OH 45404

**Tel:** (937) 226-0340

**Fax:** (937) 226-0340

**Email:** bilingo5@netzero.com

**Website:** N/A

**Year Established:** 1983

**# of Farm Projects:** 37

**# of Biogas Projects:** 13

National Methane holds a patent for a system that can verify the basis for each of the "multiple" avenues of income streams their system develops. National Methane provides complete farm evaluations and recommendations for incorporating biogas technology into a farm plan. National Methane has provided evaluations for more than 100 chicken farms, more than 60 swine farms, more than 25 dairy farms, and one sheep farm. The company also provides grant writing and public relations services related to on-farm biogas recovery and fee-based speakers for Community Groups and Agricultural Seminars.



## Consultants

### North Carolina Energy Partners

Andrew J. Courts, Jr.  
1-E Windy Court  
Greensboro NC 27407

**Tel:** (336) 402-4118  
**Fax:** (336) 292-3718  
**Email:** courts@NCEnergyPartners.com  
**Website:** www.NCEnergyPartners.com

**Year Established:** N/A  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

NC Energy Partners is a multi faceted energy efficiency and renewable energy cooperative working across many industries including commercial, educational, residential, agricultural, and municipalities. We bring together specialists in a myriad of fields to tailor brain power/experience and provide custom solutions to most energy issues.

### Northern Lake Service, Inc.

Jim Pilgrim  
400 N. Lake Avenue  
Crandon WI 54520

**Tel:** (715) 478-2777  
**Fax:** (715) 478-3060  
**Email:** jimp@nlslab.com  
**Website:** www.nlslab.com

**Year Established:** 1974  
**# of Farm Projects:** 20  
**# of Biogas Projects:** 30

NLS has been providing high quality, environmental compliance data for over 30 years. Since 1994, we have been serving the biogas industry with specialized laboratory services to determine feed stock potential and system efficiency. We maintain working relationships with a number of system manufacturers and industry experts throughout the US.

### NTH Consultants, Ltd

James Wallace, PhD PE  
41780 Six Mile Road  
Northville MI 48168

**Tel:** (248) 324-5256  
**Fax:** (248) 324-5179  
**Email:** jwallace@nthconsultants.com  
**Website:** www.nthconsultants.com

**Year Established:** 1968  
**# of Farm Projects:** 8  
**# of Biogas Projects:** 18

NTH Consultants, Ltd, founded as Neyer, Tiseo & Hindo, Ltd., in 1968 in Farmington Hills, MI, currently employs approximately 250 engineers, scientists, and technical staff. We currently operate offices in Michigan (Detroit, Northville, Pontiac, Grand Rapids and Lansing); Pennsylvania (Exton and Lehigh Valley); Cleveland, Ohio; and Indianapolis, Indiana. We provide engineering, environmental and infrastructure services on projects throughout the United States and select international projects, mostly related to the waste industry.

Our experience most relevant to the U.S. EPA AgSTAR program is projects completed for the USDA-NRCS on various concentrated animal feedlot operations (CAFOs), mostly in Michigan but also with private farms elsewhere. We are currently entering Year 2 of our second, 5-year USDA indefinite delivery contract as an EQIP-approved firm, designing manure storage management and reactor projects at various livestock operations with a concentration on dairy farms.

We received both federal and state-level Conservation Innovation Grants to evaluate and improve existing technology to measure performance of various manure storage structure liner systems using indirect, non-destructive test methods based on observed seepage losses. We are confident this research, likely completed in 2012, will provide a useful method to satisfy regulatory requirements while minimizing disruption of farms operations during testing.



## Consultants

### Omega-Alpha Recycling Systems

Robert Hamburg

Route 1, Box 51

Orma WV 25268

**Tel:** (304) 655-8662

**Fax:** N/A

**Email:** anomalous@citlink.net

**Website:** N/A

**Year Established:** 1979

**# of Farm Projects:** 2

**# of Biogas Projects:** 5

Omega-Alpha Recycling Systems (OARS) works on projects related to organic recycling and biogas systems integrated with organic farming and permaculture facilities. OARS has designed four small-scale, ambient temperature digesters: 1) Arcadia Farm, a goat, chicken, and horse farm in Orma, West Virginia with a Chinese style extended batch digester; 2) Urbanic Farm, a horse, cow, and chicken farm in Chloe, West Virginia with a Chinese style extended batch digester; 3) Agriculture Research Farm, a swine farm in Bamaco, Mali, West Africa with a Chinese style extended batch digester; and 4) the Mandali School, a school with cattle, in Chhopark, Nepal, an Indian design Gobar Gas demonstration project. OARS was also instrumental in halting a project that was environmentally and economically unsound.

### Optimal Strategies

Raj Telang

722 Highpoint Drive

Wexford PA 15090

**Tel:** (412) 254-8211

**Fax:** N/A

**Email:** raj@optimal-strategies.com

**Website:** www.optimal-strategies.com

**Year Established:** 2001

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Associated with EHV Engineering of UK.

### Organix, Inc.

Russell V. Davis

209 S. 2nd Avenue

Walla Walla WA 99362

**Tel:** (509) 527-0526

**Fax:** (509) 527-0528

**Email:** rdavis@organix.us

**Website:** www.organix.us

**Year Established:** 2001

**# of Farm Projects:** 3

**# of Biogas Projects:** 3

Organix is a residuals management firm specializing in adding value to dairy manure through processing, market development, sales and ongoing research.

### Phase 3 Developments & Investments, LLC

Norma McDonald

7155 Five Mile Road

Cincinnati OH 45230

**Tel:** (513) 265-2758

**Fax:** (330) 319-8152

**Email:** normacnc5@aol.com

**Website:** www.phase3dev.com

**Year Established:** 2005

**# of Farm Projects:** 4

**# of Biogas Projects:** 17

Phase 3 Developments & Investments, LLC (Phase 3) provides services to agricultural customers related to renewable energy and bio-based products. Services include financing and grant application preparation, business and technical feasibility studies, design, procurement, installation and commissioning services for anaerobic digestion and gasification.



## Consultants

### Positive Energy Alternatives, LLC

Delroy Leslie	<b>Tel:</b> (715) 664-6162	<b>Year Established:</b> 2004
P.O. Box 11	<b>Fax:</b> (715) 232-8824	<b># of Farm Projects:</b> 1
Menomonie WI 54751	<b>Email:</b> leslied@posengalt.com	<b># of Biogas Projects:</b> 2
	<b>Website:</b> N/A	

Positive Energy Alternatives, LLC offers consultancy services and management of anaerobic digesters to farmers and communities. The company performs feasibility studies, farm evaluations and recommendations for farmers and/or organizations interested in biogas technology. Positive Energy Alternatives, LLC also assists farmers and organizations in completing grant applications to state and federal agencies.

### Prime Solutions, Inc.

Shawn Brazo	<b>Tel:</b> (203) 482-1743	<b>Year Established:</b> 2009
143 West Street	<b>Fax:</b> (866) 960-9628	<b># of Farm Projects:</b> N/A
New Milford CT 06776	<b>Email:</b> sbrazo@primesolutions-inc.com	<b># of Biogas Projects:</b> 2
	<b>Website:</b> www.primesolutions-inc.com	

Prime Solutions, Inc., ("PSI") is a provider of integrated green-energy design, engineering, sustainability-consulting, and implementation solutions custom-tailored to help its customers achieve their energy efficiency and renewable energy goals. The company operates in the electric utility and the commercial and industrial markets. Its key customers within these markets include utilities as well as electrical cooperatives and a variety of commercial and industrial businesses, in particular, energy intensive businesses such as healthcare and higher education facilities.

PSI specializes in helping clients shift to alternative and/or renewable energy sources when it makes financial sense for them to do so. PSI also provides interconnection services to enable clients to make utility connections efficiently and in a timely, cost-effective manner.

A summary of the company's core competencies include the following:

- A full range of integrated environmental and energy infrastructure engineering and design services coupled with project procurement, construction, and installation. A staff of professional engineers, certified energy managers, project management professionals, technicians, and construction managers experienced in identifying, developing, and delivering infrastructure upgrades, on-site generation, and renewable energy projects.
- High-level capabilities of interconnecting on-site, distributed-generation resources to the utility electric infrastructure.
- Innovative applications of energy technologies across the gamut of facility operating equipment, including lighting, power generation, building controls, boilers, heating, ventilation and air conditioning equipment, compressed air, central utility plants, refrigeration, process machinery, and anaerobic digestion.
- Hands-on assistance in the processing/procurement of incentive and rebate applications with utilities as well as federal, state, and local governmental sources.

### R. Alexander Associates, Inc.

Ron Alexander	<b>Tel:</b> (919) 367-8350	<b>Year Established:</b> 1998
1212 Eastham Drive	<b>Fax:</b> (919) 367-8351	<b># of Farm Projects:</b> 10
Apex NC 27502	<b>Email:</b> alexassoc@earthlink.net	<b># of Biogas Projects:</b> 20
	<b>Website:</b> www.alexassoc.net	

R. Alexander Associates, Inc. (RAA) is an environmental consulting company specializing in 'organics recycling' (composting, AD, reuse). RAA provides a full range of technical services (e.g., facility design and evaluation, systems & equipment selection, etc.), but is acknowledged as a leader in market research and development, and is respected for its expertise in product development, product quality issues and end use. RAA provides service throughout North America, and internationally, and is known for its practical experience, creative solutions and overall understanding of the organics recycling industry.



## Consultants

### R. K. Frobel & Associates

Ronald K. Frobel, P.E.  
1153 Bergen Parkway Suite M-240  
Evergreen CO 80439

**Tel:** (303) 679-0285  
**Fax:** (303) 679-8955  
**Email:** geosynthetics@msn.com  
**Website:** N/A

**Year Established:** 1988  
**# of Farm Projects:** 30  
**# of Biogas Projects:** 4

Established in 1988, R.K. Frobel & Associates consulting engineers provides design and construction assistance in the growing field of geosynthetics including design assistance in both animal waste lining systems and waste / anaerobic digester cover systems. Design assistance is provided to full service engineering firms or facility / farm owners. As principal of R.K. Frobel & Associates, Mr. Frobel has over 25 years of experience in synthetic lining and cover systems including agricultural applications.

### R. M. Service & Associates

Robert M. Service  
110 East Bremer Avenue, Suite A  
Waverly IA 50677

**Tel:** (800) 873-0679  
**Fax:** (319) 352-5765  
**Email:** rmsa@mchsi.com  
**Website:** www.yourenergyoptions.com

**Year Established:** 1973  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** 1

We specialize in "global" consulting and project system development using micro hydroelectric, solar thermal, waste utilization, and greenhouse farming technologies, especially for community supported agriculture, relief, and economic development projects. Our energy consulting and product development is focused on electric power plant development (portable & stationary 70-700 Kw) and on hot water heating system development, all using low cost and agricultural waste fuels. We conduct fuel conversions, audits, fuel surveys, arbitration/mediation technical support, and community development planning. We support community development and community energy projects, along with providing industry research reports.

### RCM International LLC

Angie McEliece  
P.O. Box 4716  
Berkeley CA 94704

**Tel:** (510) 834-4568  
**Fax:** (510) 834-4529  
**Email:** angie@rcmdigesters.com  
**Website:** www.rcminternationalllc.com

**Year Established:** 1982  
**# of Farm Projects:** 80+  
**# of Biogas Projects:** 80+

RCM International is in the business of designing, building, and maintaining anaerobic digester systems. Our goal has always been to provide a profitable project that the owner is proud of.

RCM staff has designed and built over 85 successfully operating farm digester systems (in the United States and internationally). Our smallest digesters were a 200 pig digester and a 200 cow digester. Our largest operating digesters include an 8,000-cow dairy, 239,000 finish hog, 5,000 sow to wean, and 25,000 hog (farrow-to-finish). Over half of our digesters are co-digesting other wastes including whey, ice cream, fruit juice, fish breeding, yeast, and grease trap waste. RCM provides design services, equipment specification and procurement, construction management services as well as comprehensive turn-key construction services for the implementation of biogas projects.

### Richard Chambers

Richard Chambers  
1102 Don Cubero Ave.  
Santa Fe NM 87501

**Tel:** N/A  
**Fax:** N/A  
**Email:** rhcha@aol.com  
**Website:** N/A

**Year Established:** 1961  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Construction project administrator and engineer.



## Consultants

### Richmond Energy Associates

Jeff Forward

2899 Hinesburg Road

Richmond VT 05477

**Tel:** (802) 434-3770

**Fax:** (802) 434-2344

**Email:** forward@gmavt.net

**Website:** N/A

**Year Established:** 1997

**# of Farm Projects:** 15

**# of Biogas Projects:** 15

Richmond Energy Associates is a renewable energy company specializing in anaerobic digestion feasibility analysis.

### Russell J. Murray & Associates

Russ Murray

736 W. Pico Avenue

Fresno CA 93705

**Tel:** (559) 224-7547

**Fax:** (559) 224-7547

**Email:** russjmurray@aol.com

**Website:** N/A

**Year Established:** 2003

**# of Farm Projects:** 2

**# of Biogas Projects:** 8

Design, construction supervision and start up of anaerobic digesters for the dairy, food processing and wine industries.

### Selective Site Consultants, Inc.

Terry Super

8500 West 110th Street, Suite 300

Overland Park KS 66210

**Tel:** (913) 438-7700

**Fax:** (913) 438-7777

**Email:** terry.super@selectivesite.com

**Website:** www.selectivesite.com

**Year Established:** 1993

**# of Farm Projects:** N/A

**# of Biogas Projects:** 3

Selective Site Consultants is a site development consultant that provides site acquisition, engineering and construction management services for several industries including renewable energy using the patented Advanced Anaerobic Digestion System (AADS).

### Sellew & Associates, LLC

Paul Sellew

84 Shady Brook Lane

Carlisle MA 01741

**Tel:** (978) 371-0501

**Fax:** (978) 371-0199

**Email:** psellew@comcast.net

**Website:** N/A

**Year Established:** 1998

**# of Farm Projects:** 1

**# of Biogas Projects:** 1

Broad range of experience in manure and industrial organics anaerobic digestion.

### Sharp Energy, Inc.

Roy Sharp

24684 Road 148

Tulare CA 93274

**Tel:** (559) 688-2051

**Fax:** (559) 688-1111

**Email:** rsharp6368@aol.com

**Website:** N/A

**Year Established:** 1983

**# of Farm Projects:** 5

**# of Biogas Projects:** 12

Sharp Energy, Inc. consults, designs, and sets up effective and efficient waste management and energy production systems. Sharp Energy developed systems for the following farms: 1) Royal Farms, a 16,000-head swine farm in Tulare, California; 2) Sharp Ranch, a 5,000-head swine farm in Tulare, California; 3) Sharp Enterprises, an 8,000-head swine farm in Caruthers, California; and 4) Petrorio Farm, a 3,000-head swine farm in Skopje, Macedonia. Sharp Energy designed covers for the following farms: Cal Poly San Luis Obispo (an AgSTAR Demonstration Farm), a 300-cow dairy in San Luis Obispo, California; and Laurencio Dairy, a 1,200-cow dairy in Tulare, California.



## Consultants

### Short Elliott Hendrickson

Russ Stammer  
3240 E River Road NE  
Rochester MN 55906

**Tel:** (507) 529-7200  
**Fax:** (507) 529-7201  
**Email:** jmickelson@sehinc.com  
**Website:** www.sehinc.com

**Year Established:** 1929  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** 50

Consulting Engineers.

### SJH and Company, Inc.

Michael Masterovsky  
8 Faneuil Hall Market Place, 3rd Floor  
Boston MA 02109

**Tel:** (617) 239-1120  
**Fax:** (617) 973-6406  
**Email:** masterovsky@sjhandco.com  
**Website:** www.sjhandco.com

**Year Established:** 1990  
**# of Farm Projects:** 3  
**# of Biogas Projects:** 3

SJH's Renewable Energy Consulting Group has over 15 years of proven experience and expertise providing independent, third-party management consulting services to project developers and financial institutions operating in the ethanol, biodiesel, biomass (including anaerobic digestion) and co-generation sectors.

### Stewart Environmental Consultants, Inc.

Fred Porter  
3801 Automation Way  
Fort Collins CO 80525

**Tel:** (970) 226-5500  
**Fax:** N/A  
**Email:** fred.porter@stewartenv.com  
**Website:** N/A

**Year Established:** 1957  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** 4

Environmental consulting firm specializing in wastewater treatment and reuse. Feasibility studies, anaerobic facility design, build, operate, financing available.

### Tetra Tech EM, Inc.

Charles Egigian-Nichols  
1230 Columbia Street, Suite 1000  
San Diego CA 92101

**Tel:** (425) 877-2802  
**Fax:** (425) 877-2899  
**Email:** charles.enichols@ttemi.com  
**Website:** www.tetrattech.com

**Year Established:** 1966  
**# of Farm Projects:** 20+  
**# of Biogas Projects:** 20+

Tetra Tech is a leading provider of consulting, engineering, and technical services worldwide. We are a diverse company, including individuals with expertise in science, research, engineering, construction, and information technology. Our strength is in collectively providing integrated services—delivering the best solutions to meet our clients' needs. In a complex world with competing demands for limited resources, Tetra Tech offers clear solutions made possible with sound science, understanding, innovation, and industry-leading approaches.

### Tiry Engineering, Inc.

Mike Tiry  
P.O. Box 44  
Chippewa Falls WI 54729

**Tel:** (866) 944-6777  
**Fax:** (715) 723-6842  
**Email:** contact@tiryengineering.com  
**Website:** www.tiryengineering.com

**Year Established:** 1994  
**# of Farm Projects:** 12  
**# of Biogas Projects:** 12

Tiry Engineering, Inc. has designed two digesters in New York and has provided supplement design (permitting, site design, tank design, and feasibility studies) services for numerous digester projects. Tiry Engineering, Inc. (TEI) was formed in 1994 providing engineering services to the agricultural community. With over 80 years of combined experience, we strive to provide the services our clients need by our dedication to both excellence and integrity.



## Consultants

### Triple Bottom Consulting, LLC

John Norwood

1611 Green Branch Circle

West Des Moines IA 50265

**Tel:** (515) 556-9765

**Fax:** (515) 440-1440

**Email:** jmnorwood@hotmail.com

**Website:** N/A

**Year Established:** 1998

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

John Norwood is an expert consultant engaged in the development of new business models, strategies and policies designed to stimulate the development of locally – and regionally – based food, fiber and energy systems, and other agriculturally-related specialty products. Mr. Norwood has more than 20 years of professional experience in program development and promotion, spanning the public, private and non-profit sectors. Mr. Norwood has a proven track record of driving organizations to achieve far reaching goals, by combining innovative business practices and systems, with rigorous data analysis, in-depth problem solving skills, and incentive-driven partnerships. A consensus builder, Mr. Norwood is known for his ability to provide creative, innovative leadership on multiple levels — from large picture “vision” to detailed focus. Mr. Norwood's past clients include Drake University's Agricultural Law Center and the Maxyfield Cooperative (community-based approach to manure management and methane recapture). In connection with his innovative work, Mr. Norwood has successfully raised more than \$2 million in grant awards from federal and state sources, including the states of Iowa and California.

### Universal Entech, LLC

Daniel Musgrove

5501 N. 7th Avenue, PMB 233

Phoenix AZ 85013-1756

**Tel:** (602) 268-8849

**Fax:** (602) 268-9742

**Email:** dmusgrove@earthlink.net

**Website:** N/A

**Year Established:** 1993

**# of Farm Projects:** 3

**# of Biogas Projects:** N/A

Universal Entech, LLC is an organic resource management company providing manure management and wastewater treatment services to the CAFO industry. The company focuses on developing turnkey solutions that comply with its clients' nutrient management plans and discharge requirements. Universal Entech's team has extensive experience in the development and operation of renewable energy systems utilizing biogas from municipal wastewater and landfill applications.

### VerdiTech

Ken Abercrombie

12749 East Heather Drive

Clovis CA 93611

**Tel:** (559) 297-7370

**Fax:** (559) 297-7370

**Email:** verditech@aol.com

**Website:** N/A

**Year Established:** 2001

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

VerdiTech consults, designs, and manages systems to convert livestock manure into energy. Also provides services to develop quality monitoring for effective field application and crop production.

### WAB Associates

Wayne Bostick

12570 Shelby Rd.

Minster OH 45865

**Tel:** (419) 628-0321

**Fax:** N/A

**Email:** wabassc@adelphia.net

**Website:** N/A

**Year Established:** 2004

**# of Farm Projects:** 3

**# of Biogas Projects:** 3

40 years of experience primarily in the technical and service aspects of power generation systems; diesel, gaseous, and biogas. Assistance with the selection, application, and operation of generation systems.



## Consultants

### Waster Busters

Ralph Ross  
3302 Williams Glen Drive  
Sugar Land TX 77479-2443

**Tel:** (281) 980-0971  
**Fax:** (281) 980-0971  
**Email:** coinmanross@windstream.net  
**Website:** N/A

**Year Established:** 2011  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

New consultant company start-up designed to remove organic waste.

### WELTEC BIOPOWER

Craig Wong  
6081 Meridian Avenue, Suite 70-121  
San Jose CA 95120

**Tel:** (408) 657-0852  
**Fax:** N/A  
**Email:** c.wong@weltec-biopower.com  
**Website:** www.weltec-biopower.com

**Year Established:** 2001  
**# of Farm Projects:** 240  
**# of Biogas Projects:** 260

Weltec Biopower plans and provides modular, stainless steel biogas facilities around the world. These modular stainless steel digesters are easy to construct, so installations can be designed with experience in Germany and assembled throughout the world to a high tolerance. The use of high quality stainless steel offers superior durability in the corrosive biogas environment. These plants will retain their value over long periods of time, offering the owner flexibility in the future. With over 260 plants around the world in 2011, Weltec Biopower looks forward to assisting the American dairy farmer and food industry create profit from their waste, with reliable stainless steel biogas plants.

### Wilcox Professional Services, LLC

Dana M. Kirk  
111 W. Edgewood Blvd, Suite 7  
Lansing MI 48911

**Tel:** (517) 882-4359  
**Fax:** (517) 882-5137  
**Email:** dana.kirk@wilcox.us  
**Website:** www.wilcox.com

**Year Established:** 1968  
**# of Farm Projects:** 1  
**# of Biogas Projects:** 1

Wilcox provides consulting, design, and construction services for agricultural waste management systems. We have worked with numerous landowners to assist in procuring Environmental Quality Incentives Program (EQIP) funding and other cost share incentives that are available through the United States Department of Agriculture-Natural Resources Conservation Service.

### Wilson Engineering Services, PC

Thomas H. Wilson, PE  
9006 Mercer Pike  
Meadville PA 16335

**Tel:** (814) 337-8223  
**Fax:** (814) 336-5191  
**Email:** twilson@wilsonengineeringservices.com  
**Website:** www.wilsonengineeringservices.com

**Year Established:** 2008  
**# of Farm Projects:** 1  
**# of Biogas Projects:** 2

Wilson Engineering Services (WES) specializes in biomass related energy projects. WES combines extensive knowledge of crop development and waste handling systems with practical design experience to develop energy projects that are economically, environmentally, and socially beneficial. WES is experienced in development of successful applications for grant and loan programs geared towards implementing biomass energy projects. WES guides clients successfully through the red tape required to obtain grants and low interest loans for projects such as anaerobic digesters and biomass boilers.



## Consultants

### Yield Energy / Dr. Digester Biological Services

Rolfe Philip

49040 SE Middle Fork Rd.

North Bend WA 98045

**Tel:** (425) 273-4325

**Fax:** (425) 502-6641

**Email:** rolfe.philip@yieldenergy.com

**Website:** www.yieldenergy.com

**Year Established:** 2007

**# of Farm Projects:** 4

**# of Biogas Projects:** 5

Dr. Digester Biological Services provides best in class feasibility studies, preventative maintenance & biogas optimization services to both farm & urban AD facilities across North America. In addition to detailed analysis of feedstocks, in-situ digestate and day to day monitoring of operating parameters, we used a sophisticated simulation tool to predict potential biological problems in anaerobic digester systems. By providing feedstock & operational recommendations and customized trace element solutions we can stabilize an AD's biological processes & enhance its biogas production. We also publish a free monthly newsletter "Biogas-ology" that provides tips and suggestions on improving the operation of your anaerobic digester.

### Zeroemissions

Pablo Martin

80 Broad Street, 5th Floor, Suite 628

New York NY 10004

**Tel:** (212) 504-2904

**Fax:** N/A

**Email:** (See Below)

**Website:** www.zeroemissions.com/corp/web/en/index.html

**Year Established:** N/A

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Email Address: pablom.martin@zeroemissions.abengoa.com

Zeroemissions provides global solutions for climate change through the promotion, development, and trade of carbon credits, corporate carbon strategy, carbon offset services and innovation in technologies for greenhouse gas reduction.

## Developers

### A.O. Smith Engineered Storage Products Company

Dave Friederick

345 Harvestore Drive

DeKalb IL 60115

**Tel:** (815) 756-1551

**Fax:** (815) 756-1659

**Email:** dfriederick@aosmith.com

**Website:** www.slurrystore.com

**Year Established:** 1951

**# of Farm Projects:** 17

**# of Biogas Projects:** 53

A.O. Smith performs feasibility assessments, and designs and installs biogas systems. A.O. Smith has designed biogas systems for 7 farms in the U.S. and 10 farms in Europe. Examples include: 1) Huntington Dairy, a 600 cow dairy in Cooperstown, NY; and 2) University of Florida, a 500 cow dairy in Gainesville, FL.

### ACTIVA BioGreen, Inc.

Hyo Lee

One Tiffany Pointe, Suite 100

Bloomington IL 60108

**Tel:** (630) 238-3111

**Fax:** (630) 238-3151

**Email:** hyo.lee@activasns.com

**Website:** www.activasns.com

**Year Established:** 2003

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

A new venture company specializing in wastes treatment, using a new concept of far infra-red rays.



## Developers

### ADI Systems, Inc.

Albert A. Cocci

182 Main Street, Unit 6

Salem NH 3079

**Tel:** (603) 893-2134

**Fax:** (603) 898-3991

**Email:** [acocci@adi.ca](mailto:acocci@adi.ca)

**Website:** [www.adi.ca](http://www.adi.ca)

**Year Established:** 1990

**# of Farm Projects:** N/A

**# of Biogas Projects:** 100

ADI Systems has been involved in approximately 100 full-scale anaerobic system installations throughout the world. Approximately 50 of these systems treat agri-waste from food-related processing, while the remaining systems treat brewery, beverage, and chemical wastes. Each of these systems involves biogas collection and flaring or utilization (in most cases via burning in a boiler to produce hot water and steam). In several instances, utilization has involved cogeneration.

### Advance Design Consultants, Inc.

Renato O'Neal

998 Park Avenue

San Jose CA 95126

**Tel:** (408) 297-1881

**Fax:** (408) 294-3196

**Email:** [renato@adcengineers.com](mailto:renato@adcengineers.com)

**Website:** [www.adcengineers.com](http://www.adcengineers.com)

**Year Established:** 1984

**# of Farm Projects:** N/A

**# of Biogas Projects:** 6

Advance Design Consultants understands the need to address, plan, and most importantly act on renewable/sustainable efforts to reduce the carbon footprint. We have experience with the design and implantation of: Cogeneration and Trigeneration Plants; Photovoltaic Systems; Solar to Steam for Power Generation; Solar to Hot Water Systems; Biogas Power Plants; Geothermal Power Plants; Wind Power Plants; Non Potable/Recycled Water Systems; and will continue to strive for efficient designs that impact the world we live in. ADC has found with some, if not most of these systems, that the ROI is typically 5 years. However, with new government programs and local incentives we find the ROI rapidly decreasing. Advance Design Consultants also understands the need to implement capital projects and operational modifications that reduce the ownership, operations and maintenance costs of energy-consuming systems and equipment for immediate results. That is why we have initiated the "ADC Challenge" for customers looking for immediate results. You can find more information by going to "The ADC Challenge".

### Ag Environmental Solutions

Carl Theunis

2768 Poplar Street

Kaukauna WI 54130

**Tel:** (920) 532-4804

**Fax:** (920) 532-5039

**Email:** [aes@athenet.net](mailto:aes@athenet.net)

**Website:** [ag-env-sol.com](http://ag-env-sol.com)

**Year Established:** 2000

**# of Farm Projects:** 1

**# of Biogas Projects:** 1

Ag Environmental Solutions employs a process patented by and licensed to Iowa State Research. Ag Environmental Solutions' Tinedale Project is one of the largest dairy farm biogas systems in the United States with a 2,500-head capacity. The process is a complete mix using thermophilic and mesophilic temperatures enabling the system to produce a Class A bio-solid.

### AGAMA Biogas

Greg Austin

9b Bell Crescent Close, Westlake Business Park

West Lake, S. Africa 7945

**Tel:** +27(0)21 701-3364

**Fax:** +27(0)21 702-4920

**Email:** [greg.austin@agama.co.za](mailto:greg.austin@agama.co.za)

**Website:** [www.agama.co.za](http://www.agama.co.za)

**Year Established:** 2000

**# of Farm Projects:** 6

**# of Biogas Projects:** 18

AGAMA Biogas is a fully owned subsidiary of AGAMA Energy, a long established and leading consultant to the energy sector with a clear focus on renewable energy and energy efficiency. AGAMA Biogas consults to the waste industry and other stakeholders that generate ongoing 'problem' waste that typically is difficult to manage and/or lands up in landfill sites. As a company focused on quality solutions, we design engineer and implement energy from waste projects. Our three core focus areas are the larger systems pertaining to animal wastes and wastes from the food and beverage industry, on site sanitation for the built environment, and provision of thermal energy to households using a prefabricated biogas digester. Please visit our website [www.agama.co.za](http://www.agama.co.za) for further information, and email us with any questions you may have.



## Developers

### AgrEnergy LLC

Daniel DeBuhr  
 579 W16459 Woods Road  
 Muskego WI 53150

**Tel:** (262) 617-1570  
**Fax:** (262) 244-1455  
**Email:** tes@wi.rr.com  
**Website:** www.agenergyllc.com

**Year Established:** N/A  
**# of Farm Projects:** 2  
**# of Biogas Projects:** 2

Anaerobic Kit supplier with full turnkey capabilities. Project financing capacity as well.

### Agri Bio Systems

Richard Vetter, PhD, PAS, ACAN  
 2333 Tara Drive  
 Elgin IL 60123

**Tel:** (847) 888-7854  
**Fax:** (847) 888-1484  
**Email:** r.vetter@sbcglobal.net  
**Website:** N/A

**Year Established:** 1985  
**# of Farm Projects:** 7  
**# of Biogas Projects:** 7

Agri Bio Systems performs feasibility assessments and designs and installs biogas systems in the United States and abroad. Examples of biogas systems include: 1) Lindstrom Farm: a 50-cow dairy farm in Welch, Minnesota; 2) Leefer Farm, a 1,000-cow beef confinement farm in Carbin Carlinville, Illinois; 3) Smith Farm, a 70,000-broiler poultry farm in Princeton, North Carolina; 4) Naser Farm, a 1,000-sow finishing swine farm in Sibley, Iowa; 5) Hamilton Farm, a 450-sow finishing farm and a 120,000-layer poultry farm in Iowa Falls, Iowa; 6) Huntington Dairy, a 300-cow dairy farm in Cooperstown, New York; 7) Cushman Farm, a 600-cow dairy in Franklin, Connecticut; and 8) International Project, Taiwan, Environmental Training Center for Waste Management. Agri Bio Systems also acts as a coordinator on numerous animal waste and food waste projects.

### AgriClean, LLC

David Palmer  
 2925 Berry Hill Drive  
 Nashville TN 37204

**Tel:** (615) 274-9797  
**Fax:** (615) 279-9740  
**Email:** agriclean@agriclean.com  
**Website:** www.agriclean.com

**Year Established:** 2001  
**# of Farm Projects:** 1  
**# of Biogas Projects:** 4

AgriClean, LLC designs and installs biogas systems in the U.S. and abroad. Although there are a number of waste treatment technologies in its portfolio, AgriClean is a licensee of a patented fixed-film AD system from the University of Florida. Examples of biogas systems include: 1) A fixed-film digester on a swine finishing farm that produces 30,000 animals per year (around 1600 animal units (AU) at steady-state) near Greenville, NC in partnership with the Animal and Poultry Waste Management Center of NC State University; 2) A fixed-film digester and biogas use system on a 400 head (around 560 AU) dairy in Hillsboro, MS in partnership with the Mississippi Alternative Energy Enterprise; 3) A fixed-film digester and biogas use system on a swine farrow-to-finish operation that produces 64,000 animals per year (around 3580 AU at steady-state) in Canada, and; 4) An in-ground ambient temperature earthen digester and biogas use facility on a 4000 head swine nursery farm in Montpelier, MS. AgriClean also acts as a project developer on numerous animal waste and food waste projects, including a biogas plant and piping system at a 1,000 head per day beef processing facility in Mississippi. AgriClean has also designed a unique "power-flush" system (AgriJet Patent Pending) that will reduce the total amount of water used to flush the barns by close to 70%. This means that manure collected from barns is close to 6% solids as opposed to the 0.7% that exists today, making any treatment system significantly more cost-effective.



## Developers

### Agriculture Solar

Chuck Helmke

6890 Sunrise Drive, Suite 120-261

Tucson AZ 85750

**Tel:** (520) 204-4223

**Fax:** (520) 844-1003

**Email:** ChuckHelmke@agricultureSolar.com

**Website:** www.AgricultureSolar.com

**Year Established:** 2008

**# of Farm Projects:** 4

**# of Biogas Projects:** 4

AgricultureSolar.com integrates renewable energy technologies to create a renewable energy system appropriate to each customer's particular electrical power needs. AgricultureSolar.com's products and services cover the analysis, development, manufacture, integration, installation, operation, service and marketing of complete renewable energy systems. AgricultureSolar.com renewable energy system components include solar, bio-diesel, biomass, anaerobic digestion, geothermal, thermal electric generation, hydrogen generation and hydrogen fuel cell technology. We specialize in "global" consulting and project system development using solar, waste utilization, and greenhouse farming technologies, especially for supported agriculture. Our energy consulting and product development is focused on electric power plant development (portable & stationary) and on hot water heating system development, all using agricultural waste fuels. We conduct fuel conversions, audits, fuel surveys, arbitration/mediation technical support, and development planning. We support development and energy projects, along with providing industry research reports. AgricultureSolar.com understands the need to address, plan, and act on renewable sustainable efforts to reduce the carbon footprint. We have experience with the design and implantation of: Solar Photovoltaic Systems; Solar to Steam for Power Generation; Solar to Hot Water Systems; Biogas Power Plants; Geothermal Power Plants; and will continue to strive for efficient designs that impact the world we live in. AgricultureSolar.com understands the need to implement capital projects and operational modifications that reduce the ownership, operations and maintenance costs of energy-consuming systems and equipment for immediate results.

### AgroEnergien Meiners

Burkhard Meiners

Brunner Street 18

26316 Varel, Germany

**Tel:** +49(0)4453-98-58-00

**Fax:** +49(0)4453-98-58-02

**Email:** meiners@agroenergien.de

**Website:** www.agroenergien.com

**Year Established:** 2000

**# of Farm Projects:** 16

**# of Biogas Projects:** 16

Manufacturer and distributor of the self-mixed digester (SMD) biogas system. The SMD uses gas pressure for mixing and has no internal moving parts. A ground sludge separator is optional. For more information do not hesitate to contact us.

### American Biogas Company

Doug Snyder

2730 Anton Road

Madisonville KY 42431

**Tel:** (270) 825-1500

**Fax:** (270) 825-1558

**Email:** dsnyder@americanbiogas.com

**Website:** www.americanbiogas.com

**Year Established:** 2005

**# of Farm Projects:** 2

**# of Biogas Projects:** 2

American Biogas designs and manufactures equipment for the production of biogas.

### Anchor-International-LLC

Paul D. Wells

2242 Grafton Street

El Cajon CA 92020

**Tel:** (619) 261-1142

**Fax:** (619) 596-2575

**Email:** wellsng@aol.com

**Website:** www.anchor-international-llc.com

**Year Established:** 2008

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Anchor-International is a Service Disabled Veteran Owned Small Business. We are a biogas developer.



## Developers

### Andigen, LLC

Jake Dustin

1770 N. 600 E. Suite 140

Logan UT 84341

**Tel:** (435) 770-3766

**Fax:** (435) 753-2101

**Email:** JDustin@andigen.com

**Website:** www.andigen.com

**Year Established:** 1993

**# of Farm Projects:** 12

**# of Biogas Projects:** 12

Builds above ground high rate reliable anaerobic IBR digesters with a digestion time of 5 days or less (5 day HRT).

### Avatar Energy

Erin Wood / Nick DuBois

1981 North Broadway, Suite 430

Walnut Creek CA 94596

**Tel:** (925) 274-7600

**Fax:** (925) 210-9070

**Email:** ewood@avatarenergy.com

**Website:** www.avatarenergy.com

**Year Established:** 2005

**# of Farm Projects:** 5

**# of Biogas Projects:** N/A

Avatar Energy is an innovative energy company that produces an affordable modular anaerobic digester which reduces dairy costs while providing a renewable source of energy for dairy farmers regardless of herd size. The digester converts manure waste into electricity, bedding, fertilizer, and other useful by-products. Avatar Energy is unique in the alternative energy industry because we provide an "off-the-shelf" yet customized solution for manure waste management and energy generation. Our revolutionary anaerobic digester is the first scalable system to employ a tubular, modular design platform suitable for any size farm.

### Balance 4 Earth, LLC

2359 Livernois Road

Troy MI 48083

**Tel:** (248) 875-2734

**Fax:** (248) 244-0346

**Email:** nkasi@balance4earth.com

**Website:** www.balance4earth.com

**Year Established:** N/A

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Balance 4 Earth, LLC is a Michigan-based company providing turn key solutions for renewable energy, such as anaerobic biogas digesters. Our business model for biogas projects focuses on farming, greenhouse operations, and other industries that have high demand for electricity or heat and produce sustainable organic waste stream. We also develop biogas projects in cooperation with public entities at municipal waste water treatment plants or solid waste management facilities. In addition, we provide consulting services for biogas development, such as project assessment, planning, design, construction, permits processing, and environmental impact evaluations, along with training in the operation of a digester, and repair and maintenance services. We also support the handling of technical and legal issues with electrical utilities, including support for obtaining a power purchase agreements. We also can provide expertise in developing optimized financing models for projects by utilizing government funds for renewable energy and rural development incentives.



## Developers

### BalanceCO2

Selva Kumar

103 Ascension Drive

Wilmington DE 19808

**Tel:** (302) 494-9476

**Fax:** (302) 633-1325

**Email:** selva.kumar@balanceco2.com

**Website:** www.balanceco2.com

**Year Established:** 2007

**# of Farm Projects:** 3

**# of Biogas Projects:** 3

BalanceCO2 provides end-to-end project management of farm-scale anaerobic digestion with an emphasis on emissions reduction and sale of carbon credits. Converting animal and plant waste into energy can be a triple-hitter: it not only helps reduce waste going to landfills or from being released as gas into the atmosphere, but saves energy and money.

Bio-Digester Management Services:

- Feasibility analysis of waste management projects.
- Bio-digester technology assessment and selection.
- Waste to Energy (WTE) facility design and engineering.
- Engineering design and implementation of Bio-Digester.
- Farm-scale anaerobic digestion; aggregating emissions reductions for sale in carbon trading market.
- Help with financing the project.

### BBI International

Brian Duff

300 Union Blvd., Suite 325

Lakewood CO 80228

**Tel:** (303) 526-5655

**Fax:** (303) 526-7776

**Email:** bduff@bbibiofuels.com

**Website:** www.bbibiofuels.com

**Year Established:** 1995

**# of Farm Projects:** N/A

**# of Biogas Projects:** 6

Leading biofuels and renewable energy consulting firm involved in evaluation, design, and development of renewable energy technology applications. Core expertise includes biomass utilization for the production of fuels, power and chemicals, including anaerobic digestion and biomass gasification.

### Bio-en Power, Inc.

Earl Brubacher

4 Athur Street N., Elmira

Ontario, Canada N3B 3A2

**Tel:** (519) 669-5171

**Fax:** (519) 669-5982

**Email:** earlb@marbro.com

**Website:** www.bio-en.ca

**Year Established:** 2005

**# of Farm Projects:** 1

**# of Biogas Projects:** 1

We provide engineering services for designing anaerobic digestion systems to handle farm and industrial wastes using European Technology.

### BioEnergy Solutions

David Albers

200 New Steine Road, Suite 220

Bakersfield CA 93309

**Tel:** (661) 617-6240

**Fax:** (661) 617-6238

**Email:** N/A

**Website:** www.bioensol.com

**Year Established:** 1990

**# of Farm Projects:** 1

**# of Biogas Projects:** 6

BioEnergy Solution provides the infrastructure necessary to create renewable natural gas from animal waste at our expense, then share revenues from the sale of gas and carbon credits with the farmer or food processor. The result is a minimum 10-year revenue stream for the farmer or food processor. BioEnergy Solutions, based in California's agriculture-rich Central Valley, was founded by dairy farmers who understand the daily challenges farmers face.



## Developers

### BIOFerm Energy Systems

Daniela Rumpf

617 N. Segoe Road, Suite 202

Madison WI 53705

**Tel:** (608) 467-5523

**Fax:** (608) 233-7085

**Email:** info@biofermenergy.com

**Website:** www.biofermenergy.com

**Year Established:** 2001

**# of Farm Projects:** N/A

**# of Biogas Projects:** 30

BIOFerm™ Energy Systems, a Viessmann Company, is a world leader in the development of dry fermentation renewable energy facilities. BIOFerm™ designs and constructs anaerobic digestion plants that use unique dry fermentation technology to produce biogas. Biogas can be utilized in a wide array of energy generation applications (heat, electric, fuel). Because organic waste and biomass are the primary inputs, energy is recovered from untapped sources creating carbon neutral energy production and waste management solutions.

### Biofuel Industries, a Cogeneration Technologies Company

Monty Goodell, M.B.A.

12615 Jones Rd., Suite #209

Houston TX 77070

**Tel:** (512) 220-1498

**Fax:** N/A

**Email:** info@cogeneration.net

**Website:** www.AnaerobicDigesters.com & www.Biomethane.com

**Year Established:** 2001

**# of Farm Projects:** 3

**# of Biogas Projects:** 5

Biofuel Industries is a turnkey provider (design, build, finance, build, own, operate) of farm energy systems, including Anaerobic Digesters, Biomass Gasification and other "Waste to Energy" and "Waste to Fuel" Technologies.

### Biogas Energy, Inc.

Brian Gannon

4509 Interlake Ave N #222

Seattle WA 98103

**Tel:** (815) 301-3432

**Fax:** (815) 301-3432

**Email:** info@biogas-energy.com

**Website:** www.biogas-energy.com

**Year Established:** 1996

**# of Farm Projects:** 1

**# of Biogas Projects:** 1

Biogas Energy designs and builds complete mix anaerobic digesters.

### BIOGAS NORD US Inc.

Michael Groth

3900 Harney Street

San Diego CA 92110

**Tel:** (510) 227-9186

**Fax:** N/A

**Email:** groth@biogas-nord.com

**Website:** www.biogasnord-us.com

**Year Established:** 2000

**# of Farm Projects:** 155

**# of Biogas Projects:** 210

BIOGAS NORD is a leading provider of biogas recovery systems. Our team of 200 provides expertise and support in all areas of anaerobic digester technology. From concept development, detailed planning and construction to providing training and service, BIOGAS NORD is able to ensure your success.



## Developers

### Biogas Power

Shelby Tyne  
Kwazulu-Natal  
South Africa

**Tel:** +27-31-7811051  
**Fax:** +27-31-7811981  
**Email:** shelby@biogaspower.co.za  
**Website:** www.biogaspower.co.za

**Year Established:** 2005  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** 1

We are in Kwazulu-Natal, South Africa. We do projects in South Africa as well as other parts of the continent. Being innovative leaders in the field we design and construct the cheapest and most cost effective biogas plants in the world. So much so that it would be cheaper for an interested party from the USA to import our digesters and CHP plants and our expertise than it would be for an American Firm to design and construct one. We have done Farm digesters, and are consulting on a city project at the moment. We also fully utilise the methane produced in the farm project and bottle it and run tractors and utility vehicles on excess methane. We have constructed the cheapest commercial biogas plant on the planet using boiler litter.

### BioPower Technologies, Inc.

Rick Dripps  
P.O. Box 1225  
Mitchell SD 57301

**Tel:** (319) 345-6009  
**Fax:** N/A  
**Email:** biopowertechnologies@gmail.com  
**Website:** www.biopowertechnologies.com

**Year Established:** 2003  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

BioPower Technologies, Inc, maintains Exclusive License Agreement to the Fixed Film Digester developed at the University of Florida. BioPower Technologies, Inc will provide a project design specified to your company's needs. The cost will be contingent on several factors such as number of animals, feed ration, bedding material and solids separation. We work with a specialized team of engineers, constructionists, and microbiologist.

### Biothane

Ryan Johnston  
2500 Broadway  
Camden NJ 08104

**Tel:** (856) 541-3500  
**Fax:** (856) 541-3366  
**Email:** ryan.johnston@veoliawater.com  
**Website:** www.biothane.com

**Year Established:** 1987  
**# of Farm Projects:** 24  
**# of Biogas Projects:** 25

Biothane specializes in biological treatment of industrial wastewater, and designs and builds anaerobic digesters for livestock manure. Biothane worked with E3 BioFuels, LLC to develop an integrated cattle manure management/ethanol project in Mead, Nebraska that is expected to revolutionize ethanol production by virtually eliminating the need for fossil fuels. Biothane designed a nutrient recovery that separates the effluent waste stream into two separate streams, one high in solids and phosphorous, which is well-suited for composting, and the other low in solids and high in nitrogen, which will be sent to an ammonia stripping column, with aqueous ammonia as a final product.

### BioWaste Energy, Inc.

Zia Khan  
P.O. Box 8520  
Stockton CA 95208

**Tel:** (209) 465-0296  
**Fax:** (209) 465-1605  
**Email:** ziakhan@pacbell.net  
**Website:** home.pacbell.net/ziakhan

**Year Established:** 1973  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

BioWaste Energy, Inc. and its predecessors have provided quality services to industries and municipalities since 1972 and have completed more than 300 power generation projects in the United States and abroad. The company develops and finances zero discharge projects utilizing anaerobic technology. These projects treat solid and liquid waste and produce saleable products, including electricity generated from methane, liquid fertilizer, CO<sub>2</sub>, soil amendments, and recycled potable water. These facilities provide zero solid and liquid discharge. The company offers a full range of services covering all phases of project development from planning, feasibility studies, engineering design, equipment and systems supply, and construction and installation to start-up and operations.



## Developers

### Biowatt-U.S., LLC

Kirk Akin  
4644 South Warner Road  
Carson City MI 48811

**Tel:** (989) 584-6241  
**Fax:** (989) 584-6305  
**Email:** [kakin@midmich.net](mailto:kakin@midmich.net)  
**Website:** [www.biowatt.de](http://www.biowatt.de)

**Year Established:** 2003  
**# of Farm Projects:** 16  
**# of Biogas Projects:** 23

Biowatt-U.S. will plan and design your complete biogas project including: design, engineering, permits, licensing, manufacturing, construction, all phases of your turnkey biogas plant. We include the start-up (including training) and commissioning of the plant, with the end result being an operating turnkey facility.

### Bruckner, Inc.

10 Patewood Dr., Patewood Plaza VI, Ste 450  
Greenville SC 29615

**Tel:** (864) 234-7111  
**Fax:** (864) 234-5511  
**Email:** [brucknerusa@brucknerinc.com](mailto:brucknerusa@brucknerinc.com)  
**Website:** [www.brucknerinc.com](http://www.brucknerinc.com)

**Year Established:** 1987  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Bruckner is a German corporation that formed the Biotec division in 2006, drawing in experienced staff of smaller German biogas companies, to provide turn-key, biogas systems for agriculture and industry. CEO Dr. Markus Helm has built over 20 biogas plants. Bruckner presently has a 1.4 MW biogas project under construction (2007) in the Czech Republic and others under development in the US and elsewhere. Bruckner biogas systems are based on a highly efficient and reliable design and can use a variety of inputs including: manure; corn; grasses and other crops; food waste; sewage sludge and other wastes or byproducts.

### Burns & McDonnell

Jeff Greig  
9400 Ward Parkway  
Kansas City MO 64114

**Tel:** (816) 333-9400  
**Fax:** (816) 333-3690  
**Email:** [jgreig@burnsmcd.com](mailto:jgreig@burnsmcd.com)  
**Website:** [www.burnsmcd.com](http://www.burnsmcd.com)

**Year Established:** 1898  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Burns & McDonnell provides engineering and construction services to a wide variety of clients in the fields of energy, infrastructure, and aviation. Burns & McDonnell specializes in project development assistance encompassing planning, design, and construction of power generation and renewal projects. Burns & McDonnell provides turnkey development, financing, design, and construction of anaerobic digester and generation projects.

### California Power Partners, Inc.

Tom Moore  
8525 Arjons Drive, Suite I  
San Diego CA 92126

**Tel:** (858) 271-5500  
**Fax:** (858) 271-5510  
**Email:** [tomm@calpwr.com](mailto:tomm@calpwr.com)  
**Website:** [www.calpwr.com](http://www.calpwr.com)

**Year Established:** 1996  
**# of Farm Projects:** 2  
**# of Biogas Projects:** 8

Calpwr is a total turn-key provider of services to the distributed generation and cogeneration industry. Our services include financial and technical analysis, engineering, equipment supply, project management, construction, financing, O&M, etc.



## Developers

### Canada Composting, Inc.

Kevin Matthews

390 Davis Drive, Suite 301, Newmarket  
Ontario, Canada L3T 7T8

**Tel:** (905) 830-1160

**Fax:** (905) 830-0416

**Email:** ccikevin@attglobal.net

**Website:** www.canadacomposting.com

**Year Established:** 1995

**# of Farm Projects:** N/A

**# of Biogas Projects:** 2

Canada Composting Inc. is a private company that holds the exclusive rights to the BTA-Process throughout Canada and the United States. The BTA-Process technology employs anaerobic digestion for the production of biogas and compost from organic waste.

### Cargill Environmental Finance

Dave Booher

9350 Excelsior Blvd, MS 139-4A  
Hopkins MN 55343

**Tel:** (317) 281-5072

**Fax:** (866) 521-5364

**Email:** Dave\_Booher@cargill.com

**Website:** www.cargillcarbon.com

**Year Established:** 2004

**# of Farm Projects:** 7

**# of Biogas Projects:** 7

CEF is a project developer in the renewable energy business. CEF offers services in overall project development and strategies for the sale of power, carbon, and biomass. CEF's BioFactory™ Solutions focuses on renewable energy production via biogas and the processing and marketing of biomass from animal waste. Electricity from biogas has distinct advantages over other forms of renewable energy, notably independence from external factors (e.g. wind, intensity of sun radiation), ability to dispatch for both base and peak load uses, high efficiency of energy extraction from raw materials and decentralized energy supply. CEF's clients derive parallel value from these BioFactory™ Solutions by profitably "greening" their value chain through emission abatement, waste reduction, synergistic cost reductions and food chain marketing. CEF's BioFactory™ Solutions is also an enabler for biomass opportunities in the agronomic sector and a key driver for potentially significant opportunities in further processed renewable energy sources.

### Chevron Energy Solutions

Alana O'Connell Ruegg

345 California Street  
San Francisco CA 94104

**Tel:** (415) 733-4668

**Fax:** (415) 733-4961

**Email:** cesfeedb@chevron.com

**Website:** www.chevronenergy.com

**Year Established:** 1997

**# of Farm Projects:** N/A

**# of Biogas Projects:** 2

Chevron Energy Solutions' provides public intuitions and businesses with environmentally sound projects that increase energy efficiency, reduce energy costs and ensure reliable, high-quality power for critical operations. The company employs proven technologies to meet customers' specific needs. Its parent, Chevron Corporation, is investing across the energy spectrum to develop energy sources for future generations by expanding the capabilities of alternative and renewable energy technologies. Chevron spent about \$2 billion on alternative and renewable energy development between 2002 and 2006, and expects to spend more than \$2.5 billion on this between 2007 and 2009. For more information, please visit www.chevronenergy.com and www.chevron.com.

### CH-Four Biogas, Inc.

Benjamin Strehler

102-1390 Prince of Wales Drive, Ottawa  
Ontario, Canada K2C 3N6

**Tel:** (613) 224-8308

**Fax:** (613) 224-1642

**Email:** info@chfour.ca

**Website:** www.chfour.ca

**Year Established:** 2005

**# of Farm Projects:** 12

**# of Biogas Projects:** 13

CH-Four Biogas Inc. is a progressive developer of anaerobic digestion technology. Specialized in the co-digestion of various agricultural and commercial organic feedstocks, CH-Four Biogas Inc. provides versatile anaerobic digestion solutions.



## Developers

### Clear Horizons

Leo Maney

5070 N 35th Street

Milwaukee WI 53209

**Tel:** (414) 831-1264

**Fax:** (414) 462-7711

**Email:** leo.maney@pieperpower.com

**Website:** www.clearhorizonsllc.com

**Year Established:** 2005

**# of Farm Projects:** 3

**# of Biogas Projects:** 5

Clear Horizons is a developer of biogas energy systems headquartered in Milwaukee, WI. Clear Horizons is a subsidiary of PPC Partners, Inc. Clear Horizons provides complete technical services, all required construction services, and the ability to operate and maintain the system for the customer. This greatly reduces the time commitment typically required from the customer, provides one source of responsibility for the entire project, and develops a partnership with the customer for the life of the project.

### DLS EnviroSolutions Inc.

John van Logtenstein

6403 Egremont Drive, Komoka

Ontario, Canada NOL 1R0

**Tel:** (519) 666-1404

**Fax:** (519) 666-0627

**Email:** john@dairylane.ca

**Website:** www.dlsevenirosolutions.ca

**Year Established:** 2006

**# of Farm Projects:** 6

**# of Biogas Projects:** 8

DLS EnviroSolutions Inc. (DLS) is a full service digester development company serving the North American market place. DLS is actively involved in all stages of the development process, including project feasibility, system design, engineering, construction, system service and biological support. The DLS approach to digester design/construction/support is centered on the operator, whereby DLS provides the level of support required to bridge the operator's comfort level and ensure the successful realization of the plant's performance specifications.

### DMK Ingerieria, S.L.

Daniel Morris Kraut

C/ Gutiérrez Herrero 52

Avilés - Asturias Spain

**Tel:** +34 98-555-1833

**Fax:** +34 98-551-1060

**Email:** krautdm@dmkingenieria.es

**Website:** www.dmkingenieria.es

**Year Established:** 2006

**# of Farm Projects:** 4

**# of Biogas Projects:** 10

DMK Ingeniería, S.L. is an Environmental Engineering Company located in Northern Spain dedicated to the development of Biogas, Biodiesel and other Bioenergy Projects in Europe, Latin America and North America. DMK Ingeniería, S.L. is active in European Projects, and is interested in collaborating with North American Companies interested in joint collaboration projects.

### DVO, Inc. (formerly GHD, Inc.)

Steve Dvorak

P.O. Box 69

Chilton WI 53014

**Tel:** (920) 849-9797

**Fax:** (920) 849-9160

**Email:** info@dvoinc.net

**Website:** www.dvoinc.net

**Year Established:** 1985

**# of Farm Projects:** 60

**# of Biogas Projects:** 80

DVO, Inc. provides engineering and system installation experience in the anaerobic digester industry. DVO, Inc., with its patented mixed plug flow digester design, has over 80 operating anaerobic digesters at more than 60 farms in the US.



## Developers

### EA Engineering, Science, and Technology

Robert Newman  
15 Loveton Circle  
Sparks

MD 21152

**Tel:** (410) 771-4950  
**Fax:** (410) 771-4204  
**Email:** rnewman@eaest.com  
**Website:** www.eaest.com

**Year Established:** 1973  
**# of Farm Projects:** 20  
**# of Biogas Projects:** 100

EA Engineering, Science, and Technology is a full service environmental consulting firm with offices nationwide. In addition to providing multimedia consulting services, EA has designed and built several large scale biogas projects (i.e., conceptualization, design, building), primarily at meat-processing facilities.

### ECOCORP

Dr. John Ingersoll  
1211 South Eads Street  
Arlington

VA 22202

**Tel:** (703) 979-4999  
**Fax:** N/A  
**Email:** jgingersoll@ecocorp.com  
**Website:** www.ecocorp.com

**Year Established:** 1998  
**# of Farm Projects:** 3  
**# of Biogas Projects:** 15

ECOCORP has extensive, international experience with the design and implementation of biogas facilities and the production of bio methane as a renewable, alternative fuel. Wet or dry as well as mesophilic or thermophilic anaerobic digestion processes are offered. Biogas upgrading to pipeline quality natural gas, carbon dioxide sequestration, organic fertilizer processing, and waste water treatment are also integral parts of the ECOCORP process. Services include project feasibility studies, substrate selection, sampling and testing, permitting, engineering, construction support and/or management, start up support, commissioning, facility operation and management. Additional services include greenhouse gas offset calculations and carbon credit verification. Clients include agricultural and industrial entities as well as communities and municipalities. The ECOCORP team of engineers, scientists and managers has been involved in the realization of over 15 large commercial biogas installations and several smaller ones, has a broad area of expertise, and will tailor the anaerobic digestion process and biogas facility design to meet the unique needs of your project.

### Ecovation, Inc.

Waste Solutions Group  
Eastgate Square, 50 Square Dr. Ste 200  
Victor

NY 14564

**Tel:** (585) 421-3500  
**Fax:** N/A  
**Email:** info@ecovation.com  
**Website:** www.ecovation.com

**Year Established:** 2000  
**# of Farm Projects:** 1  
**# of Biogas Projects:** 6

Ecovation, Inc. delivers treatment of organic waste streams using proprietary and patented technologies that create opportunities for renewable energy utilization. Methane gas produced by the company's patented process is used at its treatment sites to operate boilers that heat wastewater for treatment. The methane can also be cleaned and used as a natural gas alternative.

### EISENMANN Corporation

Tom Gratz  
150 E. Dartmoor Drive  
Crystal Lake

IL 60014

**Tel:** (815) 455-4100  
**Fax:** N/A  
**Email:** es.info@eisenmann.com  
**Website:** www.eisenmann.us.com

**Year Established:** 1977  
**# of Farm Projects:** 80  
**# of Biogas Projects:** 80

EISENMANN's proprietary BIOGAS technology utilizes anaerobic digestion to convert high solid waste organics to biogas. The biogas can either be directed to a combined heat and power (CHP) system to produce electrical power or it can be cleaned/compressed and fed into the natural gas pipeline or utilized as a transportation fuel alternative.



## Developers

### Energies Direct, LLC

Michael Zander  
431 Water Street  
Sauk City WI 53583

**Tel:** (608) 644-1112  
**Fax:** (608) 643-3234  
**Email:** zander@energies-direct.com  
**Website:** www.energies-direct.com

**Year Established:** 2007  
**# of Farm Projects:** 4  
**# of Biogas Projects:** 4

After building four anaerobic digesters, Michael Zander partnered with Paul Soglin in 2008 in Energies Direct LLC (ED). The company constructs digesters on a turnkey basis for farms and commercial customers as well as investor owned facilities. ED is backed by years of German engineering in the biodigester industry. ED can provide a range of services from feasibility studies to construction and servicing. ED can work with all kinds of organic waste from manure to spoiled bakery goods, from switch grass to thin stillage.

### entec biogas USA

Catie Lewis  
4520 North State Road 37  
Orleans IN 47112

**Tel:** (812) 865-3232  
**Fax:** (812) 865-1490  
**Email:** clewis@reynoldsinc.com  
**Website:** www.entecbiogasusa.com

**Year Established:** N/A  
**# of Farm Projects:** 20  
**# of Biogas Projects:** 37

With the increased global emphasis placed on energy and the environment today, there has never been a better time to implement responsible, efficient waste management strategies. To address this challenge, Reynolds, Inc of Orleans, IN and entec biogas gmbh of Fussach, Austria, have partnered together as entec biogas USA. Offered exclusively in North America through a teaming agreement, entec biogas USA combines the benefits of proven European biogas technology with the full service capabilities of a nationally recognized construction company. We concentrate on the design of mid and large scale biogas plants and have significant experience with a wide range of applications: agriculture industry, food and bio waste collecting and processing companies, food production industry (solid waste/waste water), abattoirs, rendering plants, distilleries, bioethanol and biodiesel producers, and municipal digester plants. Projects performed by entec biogas USA are delivered in a performance based Engineer Procure Construct (EPC) package.

### Environmental Developers, Inc.

Herman P. Miller III, PE  
P.O. Box 2964  
Yountville CA 94599

**Tel:** (707) 945-0149  
**Fax:** N/A  
**Email:** HPMiller3D@aol.com  
**Website:** www.vradenergy.com

**Year Established:** 1995  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** 1

Patented technology for smallest, fastest, most efficient BioWaste to energy conversion with pure water and automatic carbon dioxide sequestering attributes; is completely enclosed; requires no waste ponding; and environmentally clean.

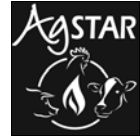
### Environmental Energy Company

Dennis Burke  
6007 Hill Road NE  
Olympia WA 98516

**Tel:** (360) 923-2000  
**Fax:** (360) 923-1642  
**Email:** dennis@makingenergy.com  
**Website:** www.makingenergy.com

**Year Established:** 1991  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Environmental Energy Company, formerly Cyclus Envirosystems (a division of Western Environmental Engineering), solves waste management problems through innovative process technologies. The company developed and patented new anaerobic and flotation processes that allow them to solve waste management problems at significantly less cost and with better capture of components.



## Developers

### Environmental Products & Technology Company (EPTC)

Marvin Mears  
2219 E. Thousand Oaks Blvd., Suite 373  
Thousand Oaks CA 91362

**Tel:** (805) 492-6865  
**Fax:** (818) 865-2205  
**Email:** marvin@eptcorp.com  
**Website:** www.eptcorp.com

**Year Established:** 1994  
**# of Farm Projects:** 3  
**# of Biogas Projects:** 4

Environmental Products & Technology Company (EPTC) developed two anaerobic digester projects at Utah State University. Both systems are multi-tank systems with the objective of developing short HRT cycles. Short HRT can reduce both the size of the system and the associated costs. Developed an Aerobic Bio-reactor for the processing of manure into pathogen free, weed seed free, odor free, pasteurized, soil amendment or animal bedding with a process cycle of 72 hours.

### Environmental Systems

Steven Childs  
9211 East Harry #2110  
Wichita KS 67207

**Tel:** (316) 652-0479  
**Fax:** (316) 652-0479  
**Email:** stevenlchilds@aol.com  
**Website:** www.environmentalsystems.info

**Year Established:** 2009  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Founded by an Environmental Engineer experienced in site remediation. Able to provide crews for installation of subsurface drip irrigation systems as well as the management of livestock waste, including capture of biogas.

### EnviTec Biogas USA, Inc.

Dennis Nahuijsen  
70 Linden Oaks, 3rd Floor, Suite 23  
Rochester NY 14625

**Tel:** (585) 662-4175  
**Fax:** (585) 383-5305  
**Email:** d.nahuijsen@envitec-biogas.com  
**Website:** www.envitec-biogas.com

**Year Established:** 2002  
**# of Farm Projects:** 350+  
**# of Biogas Projects:** 400+

EnviTec Biogas USA Inc. is a subsidiary of EnviTec Biogas AG - Germany. EnviTec Biogas USA Inc. covers the entire value chain for the production of biogas - including the planning and construction of biogas plants as well as their commissioning. The company provides the biological and technical service. In Güstrow, in the German state of Mecklenburg- Western Pomerania, EnviTec Biogas built the world's largest plant for the production of biogas to natural gas standards with a thermal output of 55 megawatts. In addition, the company also operates its own biogas plants. Today, the company is represented in more than 15 countries throughout Europe, as well as in India and the United States of America. The EnviTec Group currently has 457 employees. EnviTec has been listed on the Prime Standard segment of the Frankfurt Stock Exchange since July 2007.

### Fagen, Inc.

Steven P. Stokke  
501 Hwy 212 West  
Granite Falls MN 56241

**Tel:** (320) 564-3324  
**Fax:** (320) 564-3278  
**Email:** sstokke@fageninc.com  
**Website:** www.fageninc.com

**Year Established:** 1988  
**# of Farm Projects:** 2  
**# of Biogas Projects:** 2

Fagen, Inc. was founded on the principle of making our clients successful. From local, agricultural grassroots initiatives to construction management for Fortune 500 companies, we have the broad range of skills and services necessary to be your single source contractor.



## Developers

### Farm Power Northwest, LLC

Kevin Maas	<b>Tel:</b> (360) 424-4519	<b>Year Established:</b> 2007
1934 South Wall Street	<b>Fax:</b> N/A	<b># of Farm Projects:</b> 1
Mount Vernon WA 98273	<b>Email:</b> farmpowernw@gmail.com	<b># of Biogas Projects:</b> 1
	<b>Website:</b> www.farmpower.com	

Farm Power organizes, owns, and operates community anaerobic digesters. Our first project processes manure from two neighboring dairy farms and compensates them with enough digested fiber to bed their cows. Farm Power has gained significant expertise by doing all its own feasibility-study, grant-writing, permitting, financing, political, and regulatory work.

### First Carbon Credits Corporation

Robert Coulter	<b>Tel:</b> (403) 556-0605	<b>Year Established:</b> 2010
5912-60 Street, Olds	<b>Fax:</b> (888) 719-6091	<b># of Farm Projects:</b> 50
Alberta, Canada T4H1Y2	<b>Email:</b> robert.coulter@shaw.ca	<b># of Biogas Projects:</b> 3
	<b>Website:</b> N/A	

Robert Coulter and his various business partners have combined their efforts under different corporate names since 1999 in pioneering and developing a commercially viable system that combines environmental science and technology into a world-class carbon trading model. The result of these efforts has produced a system that provides more efficient and better value-added incomes to the offset credit producers in agriculture, forestry and energy efficiency. He and his partners have introduced the process of viewing waste generated from one process as an energy or food source for another, providing environmentally friendly methods to the agricultural community. They called this technique "the closed loop". In 2003, Mr. Coulter as part of a team, completed a Manure Management study, on behalf of Canadian Forage, using Canadian Agricultural and Rural Diversification – Saskatchewan district grants. This report evaluated three manure management styles: covered lagoons, anaerobic digestion, and composting. Between 2003 and 2005, Mr. Coulter consulted extensively on the application of a unique business model in relation to the environmental science in various agricultural projects within Canada, and for businesses in Alberta. Robert Coulter is an environmental pioneer with significant name recognition in the field of agricultural ecology. He has steadfastly evolved the ECC business model for carbon credits trading over many years, beginning with his early environmental work in 1999 and gradually refining his systems and procedures to meet the needs of a rapidly expanding global industry.

### GHD, Inc. (see DVO, Inc.)

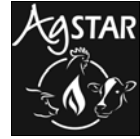
Steve Dvorak	<b>Tel:</b> (920) 849-9797	<b>Year Established:</b> 1985
P.O. Box 69	<b>Fax:</b> (920) 849-9160	<b># of Farm Projects:</b> 60
Chilton WI 53014	<b>Email:</b> info@dvoinc.net	<b># of Biogas Projects:</b> 80
	<b>Website:</b> www.dvoinc.net	

DVO, Inc. provides engineering and system installation experience in the anaerobic digester industry. DVO, Inc., with its patented mixed plug flow digester design, has over 80 operating anaerobic digesters at more than 60 farms in the US.

### Greentech Development Corp.

Kinza	<b>Tel:</b> (212) 252-2640	<b>Year Established:</b> 2009
244 5th Avenue, Suite G-204	<b>Fax:</b> (845) 371-9098	<b># of Farm Projects:</b> 1
New York NY 10001	<b>Email:</b> kinza@greentechodf.com	<b># of Biogas Projects:</b> 3
	<b>Website:</b> www.greentechodf.com	

Developers of anaerobic digestion, cogeneration and fertilizer manufacturer. Projects for agriculture and industry.



## Developers

### Hanusa Renewable Energy

Duane Hanusa  
E 12678 Hwy W  
Baraboo WI 53913

**Tel:** (608) 356-5078  
**Fax:** N/A  
**Email:** duanehanusa@gmail.com  
**Website:** N/A

**Year Established:** 2004  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Worked for 4 years Developing Alliant Energy's Digester Program projects. Developed 4 farm projects. I felt there was a need for projects on smaller farms in the 150-500 cow range. I have designed a system that will cash flow at that level and started my own company.

### Hoffland Environmental, Inc.

Robert Hoffland  
10391 Silver Springs Road  
Conroe TX 77303

**Tel:** (936) 856-4515  
**Fax:** (936) 856-1589  
**Email:** rh@hoffland.net  
**Website:** www.hoffland.net

**Year Established:** 1978  
**# of Farm Projects:** 3  
**# of Biogas Projects:** 3

Swine waste (hog manure) to methane to engine/generator set to electricity.

### KEAN Project Engineering, Inc.

Kirk Nadeau  
P.O. Box 303  
Turner ME 04282

**Tel:** (207) 225-3688  
**Fax:** N/A  
**Email:** knadeau@keanengineering.com  
**Website:** N/A

**Year Established:** 2007  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

KEAN Project Engineering is a New England based firm specializing in Project Development, Project Management, Project Engineering and Maintenance Engineering. The company is actively developing AgEnergy and Wind Energy projects in New England.

### Lakeside Systems, Inc.

Tina Honigschmidt  
2400 Plymouth Street, P.O. Box 196  
New Holstein WI 53061

**Tel:** (920) 898-5702  
**Fax:** (920) 898-5705  
**Email:** tmhonigschmidt@lakesidesystems.com  
**Website:** www.lakesidesystems.com

**Year Established:** 1976  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Lakeside Systems, Inc. designs and installs Fixed Film anaerobic digester systems in the United States. Representing BioPower Technologies (the exclusive license holder for the Fixed Film Digester, designed by the University of Florida), Lakeside Systems, Inc. installs the complete system of components required inclusive of construction to provide a turnkey installation, along with on-going maintenance programs. With 33 years of experience in agricultural waste management, Lakeside Systems is now working in the realm of anaerobic digesters.

### Lock Four

Stacy Gettier  
P.O. Box 474  
Waverly VA 23890

**Tel:** (804) 834-8317  
**Fax:** N/A  
**Email:** swg@erols.com  
**Website:** N/A

**Year Established:** 1991  
**# of Farm Projects:** 4  
**# of Biogas Projects:** 4

Lock Four performs feasibility assessments, and designs and installs biogas systems. Examples include: Barham Farm, a 4,000 sow farrow-to-wean farm in Zebulon, NC; 2) Apex Pork, an 8,600 head finishing swine farm in Rio, IL; 3) Boland Farm, a 2,000 head nursery swine farm in Williamsburg, IA; and 4) a 2,800 head farrow-to-feeding swine farm in South Boston, VA.



## Developers

### Micro-Bac International

Stephen R. Harden

3200 N. IH 35

Round Rock TX 78681-2410

**Tel:** (512) 310-9000

**Fax:** (512) 310-8800

**Email:** mail@micro-bac.com

**Website:** www.Micro-Bac.com

**Year Established:** 1979

**# of Farm Projects:** 2

**# of Biogas Projects:** 2

We are a Biotechnology company specializing in microbial solutions that biodegrade hydrocarbon contaminants.

### Microgy, Inc.

Michael Hvisdos

One Cate Street, 4th Floor

Portsmouth NH 60523

**Tel:** (603) 431-1780

**Fax:** (603) 431-2650

**Email:** mhvisdos@microgy.com

**Website:** www.environmentalpower.com

**Year Established:** 1982

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Microgy is a wholly owned subsidiary of Environmental Power Corporation. Microgy develops, owns and operates large-scale biogas facilities which can cost-effectively and reliably produce clean, renewable gas from agriculture and food industry wastes while simultaneously creating marketable carbon offset credits. Microgy's facilities produce biogas which can be used for a variety of applications: combusted in a generator to create power, used as is to offset fossil fuels, or cleaned to natural gas standards for pipeline interconnection and sale as renewable natural gas.

### Millennium Power Group

Bill Meyer

PO Box 180247

Hawaii National Park HI 96718

**Tel:** (808) 938-2439

**Fax:** (915) 990-8470

**Email:** N/A

**Website:** N/A

**Year Established:** 2003

**# of Farm Projects:** 1

**# of Biogas Projects:** 1

MPG integrates renewable energy technologies to create a renewable energy system appropriate to each customer's particular electrical power needs. MPG's products and services cover the analysis, development, manufacture, integration, installation, operation, service and marketing of complete renewable energy systems. MPG renewable energy system components include advanced tidal, wave, hydro, OTEC, solar, wind, bio-diesel, biomass, anaerobic digestion, geothermal, thermal electric generation, hydrogen generation and hydrogen fuel cell technology.

### Modern Technology Methods, LLC

Billy Ivy

P.O. Box 3292, Thompson Bridge Road #276

Gainesville GA 30506

**Tel:** (404) 287-2624

**Fax:** (404) 287-2624

**Email:** info@moderntechnologymethods.com

**Website:** www.moderntechnologymethods.com

**Year Established:** 2009

**# of Farm Projects:** 2

**# of Biogas Projects:** 2

Modern Technology Methods, LLC products & services include the following: Project Engineering Feasibility; Economic Analysis Studies; Engineering, Procurement and Construction; Environmental Engineering; Permitting; 3rd Party Ownership; Project Development; Long-term Service Agreements; Operations & Maintenance.

Offering thermophilic poultry anaerobic digestion systems designed to cleanly and efficiently convert waste into high quality methane gas with commercial, industrial, and agricultural applications. Modern Technology Methods, LLC offers cogeneration facilities providing a dedicated energy supply designed specifically to deliver facility energy savings with increased reliability. We deliver all aspects of on-site generation. With representatives across the southeast USA, Modern Technology Methods, LLC is committed to the renewable/sustainable energy business.



## Developers

### MT-ENERGIE USA, Inc.

Daniel Mann

4915 Calloway Drive, Suite 102

Bakersfield CA 93312

**Tel:** (661) 829-6900

**Fax:** (661) 829-6901

**Email:** biogas-us@mt-energie.com

**Website:** www.us.mt-energie.com

**Year Established:** 1995

**# of Farm Projects:** +140

**# of Biogas Projects:** +140

MT-ENERGIE USA, Inc. is a subsidiary of MT-ENERGIE Germany. MT-ENERGIE designs, builds, and maintains anaerobic digesters and biogas-upgrading/injection systems for North America. MT-ENERGIE helps to produce clean biogas from organic waste and for this task employs the most advanced and proven technology available today. MT-ENERGIE USA delivers cost-effective, suitable and profitable solutions for the American agriculture and renewable energy industry. MT-ENERGIE Germany is proud of more than 15 years of experience in the industry, has built more than 140 turnkey biogas facilities and is one of the leading biogas companies in Europe. MT-ENERGIE Germany has subsidiaries in six European countries and in the United States.

### MWK Biogas North America Corp.

Sylke Chesterfield

32 Clearview Terrace

Rensselaer NY 12144

**Tel:** (518) 632-4530

**Fax:** (518) 283-1287

**Email:** chesterfield@MWK-biogas.com

**Website:** www.MWK-biogas.com

**Year Established:** 2007

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

MWK specializes in highly efficient and reliable mixed-substrate anaerobic digesters that employ proven technology and extensive experience (300+ systems in Europe) to maximize quantity and quality of methane production. MWK biogas systems offer the option of using various and variable combinations of organic waste inputs, the availability of remote process monitoring and controls, ongoing biological consultation, and safety standards that exceed European regulations. MWK develops, plans, and designs the systems, then partners with local resources to facilitate the system's construction and equipment installation. Systems are tailored to the owner's needs with a focus on reliability and maximized efficiency.

### National Methane

William J. Lingo, Sr.

1823 Leo Street

Dayton OH 45404

**Tel:** (937) 226-0340

**Fax:** (937) 226-0340

**Email:** bilingo5@netzero.com

**Website:** N/A

**Year Established:** 1986

**# of Farm Projects:** 27

**# of Biogas Projects:** 31

Consult, design, build entire system of multiple benefit anaerobic digesters and CaCO<sub>3</sub>.

### New Vista Energy, Inc.

Thomas Seymour

7 Murrin Drive

Delmar NY 12054

**Tel:** (518) 528-3717

**Fax:** (518) 475-1749

**Email:** tseymour@newvistaenergy.com

**Website:** www.newvistaenergy.com

**Year Established:** 2008

**# of Farm Projects:** 1

**# of Biogas Projects:** 1

Specializing in small to medium scale system development, research, and education.



## Developers

### Northern Biogas

Grant Grinstead

P.O. Box 643

Fond du Lac WI 54936

**Tel:** (920) 948-3216

**Fax:** (866) 301-3075

**Email:** info@northernbiogas.com

**Website:** www.northernbiogas.com

**Year Established:** 2009

**# of Farm Projects:** 9

**# of Biogas Projects:** 9

Northern Biogas was formed by a professional group including Wisconsin dairy producers and licensed engineers. Our purpose is to design, build and manage renewable energy projects specifically for the dairy and agricultural industry. The goal of Northern Biogas is to provide a reliable and affordable anaerobic digester system that manages waste and odor with economic value to the owner and community. Our professional services include system design and engineering, construction management, feasibility studies, grant applications, permitting assistance, comprehensive operations training, ongoing operations and maintenance.

### Organic Alchemy

Hope Blaythorne

711 Moulder Loop Road

Smith's Grove KY 24171

**Tel:** (215) 862-0784

**Fax:** N/A

**Email:** hope@organic-alchemy.com

**Website:** www.organic-alchemy.com

**Year Established:** 2007

**# of Farm Projects:** 1

**# of Biogas Projects:** 1

We create continuous process digester's with a more efficient methane capture process and a highly efficient cycle time.

### Orgo Systems, Inc.

Mayyar Irani

16 White Block

Selingsgrove PA 17870

**Tel:** (570) 374-4402

**Fax:** (570) 374-0487

**Email:** mayyar@orgosystems.com

**Website:** orgosystems.com

**Year Established:** 1998

**# of Farm Projects:** 1

**# of Biogas Projects:** 1

Orgo Systems farm project is a 1,100 farrow-to-finish hog operation with a 4,000-hog capacity. The 24-kW engine currently supplies electricity to the barn. Orgo Systems designed this operational prototype that produces electricity, reduces odors, and separates solids for better handling of waste. Currently, Orgo Systems is working on plans for a second-generation digester system that will digest, separate, compost, and aerate for total nutrient management.



## Developers

### PacaPower, LLC

Michelle Rehmann

7353 Lowell Blvd.

Westminster CO 80030

**Tel:** (303) 717-5236

**Fax:** N/A

**Email:** pacapower@live.com

**Website:** N/A

**Year Established:** 2009

**# of Farm Projects:** 2

**# of Biogas Projects:** 5

PacaPower, LLC is a woman-owned small business engaged in consultation for design and development of sustainable renewable energy projects for the Alpaca ranching industry. With backgrounds in water quality, energy development, agriculture, and sustainability, the Principals formed PacaPower, LLC to respond to a demand for developing and implementing sustainable solutions to management of waste products for alpaca ranches. Since 1979, our principals have innovated approaches for meeting the demands of diverse environmental, energy development, and carbon reduction projects, while adapting to legal, technical and social forces that have generated regulatory change, environmental awareness, and global energy demands. PacaPower's experience teams with the Alpaca ranching community to develop sustainable anaerobic digester projects that will benefit their industry and surrounding agricultural communities by:

- Improving environmental management of livestock waste.
- Reducing heating or electrical costs for small ranch operations.
- Reducing greenhouse gas emissions to the environment.
- Introducing additional revenue streams through the sale of carbon and renewable energy credits.
- Producing marketable, cleaned fertilizers that build soils and increase nitrogen uptake.
- Reducing waste management costs.

It is PacaPower's vision that the ultimate development of safe, economic, and environmentally friendly Alpaca waste digester projects, that are scalable to ranch requirements or agricultural communities, will bring Sustainable Green Energy projects to support a variety of their State's agricultural sectors and communities.

### Perpetual Energy

Sharon Price

222 West Las Colinas Blvd., Suite 1650

Irving TX 75039

**Tel:** (972) 444-2575

**Fax:** (972) 444-2579

**Email:** sharon.price@perpetualenergyus.com

**Website:** www.perpetualenergy.co.uk

**Year Established:** 2003

**# of Farm Projects:** 5

**# of Biogas Projects:** 5

Perpetual Energy designs and builds renewable energy solutions for the industrial, commercial and public sector, replacing grid supplied energy, reducing carbon emissions and mitigating soaring energy prices. Renewable Energy Solutions range from onsite generation to offsite and from on-balance sheet to power purchase agreements. We provide a turnkey approach to guide clients through prefeasibility, planning, design, supply, installation and maintenance. With over 60 years experience and specialist knowledge, we can identify and deliver the optimum renewable energy solution for any organization or individual site. The resulting solution will also align with your business drivers and goals.

### Phinix, LLC

Dr. Subodh Das

P.O. Box 11668

Lexington KY 40577-1668

**Tel:** (859) 619-8386

**Fax:** (859) 523-9398

**Email:** skdas@phinix.net

**Website:** www.phinix.net

**Year Established:** 2008

**# of Farm Projects:** 1

**# of Biogas Projects:** 1

Carbon Management & Credits, Anaerobic Digestors, Energy and Electricity Production from Dairy and Landfill Methane.



## Developers

### PlanET Biogas Solutions

Clare Riepma, P.E.

26 Hiscott St. Ste. 201, St. Catharines  
Ontario, Canada L24 IC6

**Tel:** (905) 935-1969

**Fax:** (905) 935-7878

**Email:** info@planet-biogas.ca

**Website:** www.planet-biogas.ca

**Year Established:** 2006

**# of Farm Projects:** 9

**# of Biogas Projects:** 20

Our services include project feasibility screening and economic analysis; permits & approvals; system design and cost estimating; construction management; and post-commissioning technical and maintenance support of the equipment.

### Positive Energy Alternatives, LLC

Delroy Leslie

P.O. Box 11

Menomonie WI 54751

**Tel:** (715) 664-6162

**Fax:** (715) 232-8824

**Email:** info@posengalt.com

**Website:** www.posengalt.com

**Year Established:** 2004

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Determine Biogas Supply; Scope out the Project; Conduct Feasibility Analysis; Determine the Digester Type; Select Equipment; Create a Financial Pro Forma; Negotiate the Utility Agreement; Obtain Environmental and Site Permits; Gain Regulatory Approval; Assist in the Research of Financing; Contract with Engineering, Construction, and Equipment Supply Firms; Supervise the construction of the digester; Identify potential customers for Mulch & Fertilizer; and provide Equipment Maintenance.

### Pro-Act Biotech

Bill Donohue

P.O. Box 345

Warren RI 02885

**Tel:** (800) 772-3775

**Fax:** (401) 633-6270

**Email:** bd@proactbiotech.com

**Website:** www.proactbiotech.com

**Year Established:** 1999

**# of Farm Projects:** 1

**# of Biogas Projects:** 100+

Pro-Act biotech (formally known as Pro-Act Microbial, Inc.) is a developer of anaerobic digesters for small farms. The digester is designed for comprehensive manure treatment to enhance fertilizer value, reduce odor, and collect biogas for on-farm use. In addition, Pro-Act provides after-installation services for digester owners and developers to trouble shoot digester problems for a more stable and/or enhanced gas production through its line of custom microbes and other products.

### Proteus Energy Development, LLC

Jon Gordon James

104 Crocker Place

Williamsburg VA 23185

**Tel:** (757) 220-2129

**Fax:** N/A

**Email:** j.g.james@cox.net

**Website:** N/A

**Year Established:** 2010

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Alternative energy development.

### Quantum BioEnergy USA

Bill Beckett, Lionel Freedman, Lea Beckett

650 North 250 West

Tetonia ID 83452

**Tel:** (727) 432-0400

**Fax:** (727) 446-7893

**Email:** wbeckett1@tampabay.rr.com

**Website:** www.bioenergy.net.au

**Year Established:** 2003

**# of Farm Projects:** 3

**# of Biogas Projects:** 3

A full service funding, design, installation, service & maintenance provider of biomass to energy systems for dairy, swine, poultry, abattoir, and food processing industries.



## Developers

### R. M. Service & Associates

Robert M. Service

110 East Bremer Avenue, Suite A

Waverly IA 50677

**Tel:** (800) 873-0679

**Fax:** (319) 352-5765

**Email:** rmsa@mchsi.com

**Website:** www.yourenergyoptions.com

**Year Established:** 1973

**# of Farm Projects:** N/A

**# of Biogas Projects:** 1

We specialize in "global" consulting and project system development using micro hydroelectric, solar thermal, waste utilization, and greenhouse farming technologies, especially for community supported agriculture, relief, and economic development projects. Our energy consulting and product development is focused on electric power plant development (portable & stationary 70-700 Kw) and on hot water heating system development, all using low cost and agricultural waste fuels. We conduct fuel conversions, audits, fuel surveys, arbitration/mediation technical support, and community development planning. We support community development and community energy projects, along with providing industry research reports.

### RCM International LLC

Angie McElice

P.O. Box 4716

Berkeley CA 94704

**Tel:** (510) 834-4568

**Fax:** (510) 834-4529

**Email:** angie@rcmdigesters.com

**Website:** www.rcminternationalllc.com

**Year Established:** 1982

**# of Farm Projects:** 80+

**# of Biogas Projects:** 80+

RCM International is in the business of designing, building, and maintaining anaerobic digester systems. Our goal has always been to provide a profitable project that the owner is proud of.

RCM staff has designed and built over 85 successfully operating farm digester systems (in the United States and internationally). Our smallest digesters were a 200 pig digester and a 200 cow digester. Our largest operating digesters include an 8,000-cow dairy, 239,000 finish hog, 5,000 sow to wean, and 25,000 hog (farrow-to-finish). Over half of our digesters are co-digesting other wastes including whey, ice cream, fruit juice, fish breeding, yeast, and grease trap waste. RCM provides design services, equipment specification and procurement, construction management services as well as comprehensive turn-key construction services for the implementation of biogas projects.

### RealEnergy, LLC

Kevin Best

6712 Washington Street

Yountville CA 94599

**Tel:** (707) 944-2400

**Fax:** (707) 944-2420

**Email:** kbest@realenergy.com

**Website:** www.realenergy.com

**Year Established:** 2000

**# of Farm Projects:** 30

**# of Biogas Projects:** 30

RealEnergy, LLC has developed, built, owned, and operated more small, clean and green onsite power plants than any other independent power producer or distributed energy developer in North America. The management team has developed 43 discrete in-city power plants with electric grid interconnections, and is laser focused on investing in clean, distributed and renewable power plants, including biogas plants and profiting at exit.



## Developers

### Resource Development Associates

Phillip D. Lusk	<b>Tel:</b> (605) 945-1311	<b>Year Established:</b> 2000
108 E. Missouri Avenue	<b>Fax:</b> (605) 945-0194	<b># of Farm Projects:</b> N/A
Pierre SD 57501	<b>Email:</b> plusk@primecapture.com	<b># of Biogas Projects:</b> N/A
	<b>Website:</b> N/A	

The proposed Resource Development Associates biorefinery includes a locally managed system comprised of a 20-million gallon/year ethanol plant that uses local crops and an adjoining 28,000-head confined cattle feedlot connected to an anaerobic digester. Independent contractors will run "backgrounding" operations with additional 13,000- to 15,000-head of cattle. The complex will produce fuel-grade ethanol, finished cattle, biogas, and biofertilizers. The biorefinery is economically attractive, with an estimated internal rate of return of approximately 30 percent, achievable through significant economies of scope. A commercial demonstration of this referenced biorefinery is undergoing final detailed engineering and project development at a site located outside of Pierre, South Dakota. Construction is scheduled to commence late spring of 2002 and start-up is scheduled for the summer of 2003.

### Rose Energy Discovery, Inc.

Joseph Snodgrass	<b>Tel:</b> (765) 676-5117	<b>Year Established:</b> 2004
210 South Main Street	<b>Fax:</b> (765) 663-0706	<b># of Farm Projects:</b> 15
Advance IN 46102	<b>Email:</b> jody@roseenergy.com	<b># of Biogas Projects:</b> 25
	<b>Website:</b> www.roseenergy.com	

Rose Energy has licensed the "ET Process" for its implementation in the United States. This process utilizes bio-augmented bacteria in order to produce a much higher content biogas, typically in less than 5 days, containing virtually no hydrogen sulfide. Rose Energy is a developer providing engineering and design, construction, operation and, if needed, financing.

### Rosenberg International, Inc.

Peter Rosenberg	<b>Tel:</b> (450) 533-4183	<b>Year Established:</b> 1976
2824 N.E. 33rd Court #10	<b>Fax:</b> N/A	<b># of Farm Projects:</b> several
Fort Lauderdale FL 33306	<b>Email:</b> peter.rosenberg@sympatico.ca	<b># of Biogas Projects:</b> several
	<b>Website:</b> N/A	

Rosenberg Int. Inc. is an engineering firm that has a 30 years existence. It has developed structures and engineering solutions worldwide. Was the first environmental firm specialized in pollution issues. This firm has developed a unique technology that not only transforms manure into fuel but also uses the residues into liquid and solid fertilizers that can be sold on the market. High quality Fertilizers.

### Sansuy

Kazu Ohno	<b>Tel:</b> +55-11-2139-2602	<b>Year Established:</b> 1966
Rod. Regis Bittencourt, s/n-Km280	<b>Fax:</b> +55-11-2139-2557	<b># of Farm Projects:</b> N/A
Embu, Sao Paulo, Brazil 06830-900	<b>Email:</b> kazuohno@sansuy.com	<b># of Biogas Projects:</b> 700
	<b>Website:</b> www.sansuy.com	

Sansuy is a Brazilian public company and has established itself as the leading PVC manufacturer in Latin America. Sansuy's PVC flexible laminates have been used in various business segments such as agriculture, civil construction, transportation, visual communication, automotive, basic sanitation, etc. However, Sansuy has recently achieved a tremendous success in environmental solution business while securing several international patents on its biodigester. Since 2004, Sansuy has already posted approximately US\$20 million sales and has installed approximately 700 units of biodigester in various sizes covering 2.5 million m<sup>2</sup> in Latin America. Although not every unit is implemented for the Kyoto Protocol CDM projects, Sansuy's biodigesters have been widely implemented for CDM projects and well-recognized among CMD project owners, developers and financiers.



## Developers

### Schmack BioEnergy, LLC

Mark Suchan

7624 Riverview Road

Cleveland OH 44131

**Tel:** (216) 986-9999 x112

**Fax:** (216) 986-9999

**Email:** msuchan@schmackbioenergy.com

**Website:** www.schmackbioenergy.com

**Year Established:** 2005

**# of Farm Projects:** 161

**# of Biogas Projects:** 204

Schmack BioEnergy has partnered with the premier European biogas company, Schmack Biogas, and is dedicated to the development of sustainable green power and reliable renewable energy as a solution to environmental, economic and energy challenges facing the world today. With 265 plants worldwide, SBE employs the best available AD technology existing in the world today to produce biogas from organic residuals.

### Stellar Cascade Energy

Mike Costanti

1363 Down River Drive

Woodland WA 98674

**Tel:** (406) 579-6164

**Fax:** (866) 903-9951

**Email:** mcostanti@cascadeenergypartners.com

**Website:** N/A

**Year Established:** 2010

**# of Farm Projects:** N/A

**# of Biogas Projects:** 6

Looking for late-state opportunities where we can develop, finance, construct and operate dairy digester projects in the West.

### SunOne Solutions

Jace Nore

720 "O" Street, Lot E

Lincoln NE 68506

**Tel:** (877) 232-9815

**Fax:** N/A

**Email:** jace@sunonesolution.com

**Website:** www.sunonesolutions.com

**Year Established:** N/A

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

SunOne Solutions specializes in developing agricultural, environmental, and land management projects that are eligible for carbon offsets. Our primary project types are agriculture soil carbon sequestration projects on farmland, grassland, and rangeland in the United States, and forestry carbon sequestration projects including offset projects for afforestation, reforestation, sustainably managed forests, and international avoided deforestation projects. SunOne offers specialized carbon offset management for methane capture projects on livestock and dairy facilities including measurement, validation, and offset registration, allowing the producer to own, control and maximize profits on the carbon assets - independent and "unbundled" from the financing, engineering or renewable energy elements of a project. SunOne Solutions also provides consulting services to private, government, and non-profit clients on a wide range of environmental and infrastructure issues.

### Sustainable Technologies

Ernesto Montenero

1800 Orion Street Suite 101

Alameda CA 94501

**Tel:** (510) 523-1122

**Fax:** (510) 523-1123

**Email:** ernesto@sustainabletech.cc

**Website:** www.sustech.cc

**Year Established:** 1999

**# of Farm Projects:** 1

**# of Biogas Projects:** 1

Sustainable Technologies (ST) is a small minority owned environmental engineering and construction Company. ST designs and builds Digester, remediation systems and Solar electric systems for business.



## Developers

### Symbios Technologies, LLC

Justin Bzdek

200 W. Mountain Avenue, Suite C-104  
Fort Collins CO 80521

**Tel:** (970) 797-2543

**Fax:** (970) 797-2546

**Email:** justin@symbiostechologies.com

**Website:** www.symbioenergy.com

**Year Established:** 2008

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Symbios Technologies LLC is a waste-to-energy project developer working to reduce our clients' greenhouse gas impacts while improving waste disposal and energy economics. Our clients include municipalities, animal and food processing plants, and animal feeding operations. Symbios uses proprietary process simulation and design software to evaluate, design, and optimize integrated renewable energy facilities to produce clean energy and water, organic fertilizer, and other valuable products from waste. Symbios integrates public and private funding, on-the-ground engineering, and technology to make waste-to-energy projects economically feasible.

### Synagro

Paul Sellew

1800 Bering Drive, Suite 1000  
Houston TX 77057

**Tel:** (978) 371-0501

**Fax:** (713) 369-1750

**Email:** psellew@synagro.com

**Website:** www.synagro.com

**Year Established:** 1987

**# of Farm Projects:** 1

**# of Biogas Projects:** 6

Synagro operates at over 1,000 wastewater treatment plants throughout the country, providing operations and residuals management services. Many of these wastewater treatment plants employ anaerobic digestion. The company is using this experience to expand into the agribusiness market with its first operational facility, which was designed and built in Chino, California. This digester is designed for 225 wet tons of fresh cow manure per day. It employs dewatering and onsite cogeneration using Capstone Microturbines.

### Titan Energy Development, Inc.

Steven B. Hurt

461 Burroughs  
Detroit MI 48202

**Tel:** (313) 831-1979

**Fax:** (313) 831-1989

**Email:** shurt@titanenergy.com

**Website:** titanenergy.com

**Year Established:** 2004

**# of Farm Projects:** N/A

**# of Biogas Projects:** 2

Specialize in the development of renewable energy derived from methane gas. We will design and build a fully functional system at little or no cost to you.

### UEM, Inc.

Hemang Shah

1818 S Australian Avenue, Suite 200  
West Palm Beach FL 33409

**Tel:** (561) 683-2273

**Fax:** (561) 683-2996

**Email:** hshah@uemgroup.com

**Website:** www.uemgroup.com

**Year Established:** 1990

**# of Farm Projects:** many

**# of Biogas Projects:** 50

Financing and Turnkey Development of Anaerobic Digester and Biogas Recovery and Power Systems for Animal and Farm Wastes and other Organic Wastes from industries.



## Developers

### UTS Residual Processing LLC

Susan M. Murray  
P.O. Box 237  
Eaton Rapids MI 48827

**Tel:** (517) 663-0663  
**Fax:** (517) 663-0979  
**Email:** s.murray@uts-residuals.com  
**Website:** www.uts-residuals.com

**Year Established:** 2009  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

UTS Residual Processing belongs to the UTS group of companies, specializing in anaerobic digestion. Services range from feasibility studies through turn-key facilities. UTS Residual Processing LLC (UTS RP) provides process engineering services as well as proven technology for the complete management of agricultural and mixed waste residuals, from the point of conveyance to final process solutions. UTS RP can design and provide stabilization methods including anaerobic digestion and the associated generation and treatment of biogas. Biogas services include engineering of custom pipeline conveyance systems as well as multiple treatment options to provide bio-methane for energy and heat, vehicle or pipeline use. UTS also provides process development and technology for the management of the by-products of the stabilization process. These include proprietary methods for solid liquid separation and final treatment of the effluents. The treatment and utilization of solid by-products (composting, fertilizer, bedding), and water for either direct usage (irrigation, flushes) or further treatment is site specific; providing economic and environmental benefits.

### Valley Air Solutions, LLC

Robert Patrick  
P.O. Box 4517  
Stockton CA 95204

**Tel:** (877) 430-7600  
**Fax:** (877) 430-7600  
**Email:** robert.patrick@valleyairsolutions.com  
**Website:** www.valleyairsolutions.com

**Year Established:** N/A  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Valley Air Solutions offers expertise and solutions to dairy waste incuagement problems and assistance with revenue-producing opportunities. We design and build digesters, anaerobic lagoons, and biogas cleaning systems.

### Waste Energy Solutions, LLC

Stephen Dominick  
205 McKnight Park Drive  
Pittsburgh PA 15237

**Tel:** (630) 377-0662  
**Fax:** (630) 377-2444  
**Email:** sdominick@fromwastetoenergy.com  
**Website:** www.fromwastetoenergy.com

**Year Established:** 2003  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Waste Energy Solutions, Inc is a turnkey supplier of community sized anaerobic digester plants. We are a Danish anaerobic digester design licensee. We promote thermophilic operation with co-digestion. We encourage CHP and other best uses for the biogas produced.

### Williams Engineering Associates

Doug Williams  
18039 Blue Winged Court  
Woodland CA 95695

**Tel:** (530) 669-7236  
**Fax:** (530) 669-7982  
**Email:** wmsenr@thegrid.net  
**Website:** N/A

**Year Established:** 1985  
**# of Farm Projects:** 10  
**# of Biogas Projects:** 10

Williams Engineering Associates has been in the business of design, feasibility, research and supervision of start-up of anaerobic digesters for on-farm operation for 23 years. Doug Williams, principle and owner was a professor of BioResource and Agricultural Engineering for 22 years at Cal Poly.



## Developers

### Yield Energy, Inc.

Rolfe Philip  
49040 SE Middle Fork Road  
North Bend WA 98045

**Tel:** (425) 273-4325  
**Fax:** (425) 273-4325  
**Email:** rolfe.philip@yieldenergy.com  
**Website:** www.yieldenergy.com

**Year Established:** 2007  
**# of Farm Projects:** 2  
**# of Biogas Projects:** 6

Yield is focused on designing, developing and providing on-going operational assistance to farm based anaerobic digestion facilities that intend to utilize off-farm feedstocks to supplement biogas production. We have developed a sophisticated AD simulation tool, substrate testing & micro nutrient supplement regime that ensures optimal biogas production and stable plant operations.

### Zoladz Construction

Brian Swiatek  
13600 Railroad Street  
Alden NY 14004

**Tel:** (716) 937-6575  
**Fax:** (716) 937-6369  
**Email:** bswiatek@zoladzconstruction.com  
**Website:** www.zoladzconstruction.com

**Year Established:** 1981  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Landfill construction.

## Energy Service Providers

### Alliant Energy

2777 Columbia Drive  
Portage WI 53901-9483

**Tel:** (608) 742-0888  
**Fax:** (608) 742-0890  
**Email:** customer@alliantenergy.com  
**Website:** www.alliantenergy.com

**Year Established:** 1998  
**# of Farm Projects:** 3  
**# of Biogas Projects:** 6

Headquartered in Madison, Wisconsin, Alliant Energy Corporation is a growing energy-service provider with operations in the United States and abroad. The company provides electric, natural gas, water, and steam services to nearly three million customers worldwide.

### Alternative Carbon Resources, LLC

Zack Hedrington  
2047 Hickory Trail  
Pella IA 50219

**Tel:** (319) 333-2000  
**Fax:** (888) 316-0829  
**Email:** zach@alternativecarbonresources.com  
**Website:** www.alternativecarbonresources.com

**Year Established:** 2010  
**# of Farm Projects:** 6  
**# of Biogas Projects:** 10

We provide all different kinds of feedstocks to anaerobic digesters for conversion into methane and subsequent energy generation. We can deliver anywhere in the United States. We can be a huge asset for any operation trying to get off the ground or increase capacity.

### Eco-Cure, Inc.

Jim Kritchever  
1525 Casa Buena Drive, Suite D  
Corte Madera CA 94925

**Tel:** (888) 924-8450  
**Fax:** N/A  
**Email:** jimkritchever@yahoo.com  
**Website:** www.eco-cure.com

**Year Established:** 2000  
**# of Farm Projects:** 10  
**# of Biogas Projects:** 10

Producer of enzyme product that increases methane, reduces H<sub>2</sub>S, shortens retention time.



## Energy Service Providers

### Smart Drilling Tech

Mahicon Astuyauri

504 Plaza Village Drive

Lafayette

LA 70506-5118

**Tel:** N/A

**Fax:** N/A

**Email:** mahj\_ast@hotmail.com

**Website:** N/A

**Year Established:** N/A

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Drilling, energy.

## Financing Specialists

### AgRefresh

Jeffrey C. Frost

P.O. Box 843

Burlington

VT 05402

**Tel:** (802) 859-0099

**Fax:** (815) 291-1011

**Email:** jfrost@agrefresh.org

**Website:** www.agrefresh.org

**Year Established:** 2003

**# of Farm Projects:** 15

**# of Biogas Projects:** 15

AgRefresh is a carbon offset broker exclusively for farm energy systems. We also have a Section 9006 application success track record for grant writing for these projects.

### Cat Power Finance

Jon Best

2120 West End Avenue

Nashville

TN 37203

**Tel:** (615) 341-8571

**Fax:** N/A

**Email:** jon.best@cat.com

**Website:** www.catpowerfinance.com

**Year Established:** 1981

**# of Farm Projects:** 5

**# of Biogas Projects:** 20+

Financial Services for renewable Energy projects utilizing Caterpillar power generation equipment.

### CBL Lending

Gordon Ledingham

841 Bishop St Ste 1516

Honolulu

HI 96813

**Tel:** (808) 585-7337

**Fax:** (808) 585-7447

**Email:** gledingham@cblending.com

**Website:** www.cblending.com

**Year Established:** 1999

**# of Farm Projects:** 6

**# of Biogas Projects:** 2

Commercial and Business Lending (Hawaii Lending Specialists, LLC) is active in the Western US but covers all 50 states and US territories. We specialize in long-term asset finance utilizing conventional, USDA Rural Development, SBA 7a/504, and other loan programs, as well as tax credits. Our special interest areas are: Renewable Energy and Ag. As a full service advisor/broker, we provide loan origination, underwriting, and closing on business and commercial loans. Other industries/collateral financed includes industrial, agricultural, tourism & entertainment, C&I, retail/office, hospitality, and marine & aircraft. We work with national and regional lenders and investment banks, as well as specialty lenders, community banks, insurance companies.



## Financing Specialists

### Climate Action Reserve

Max DuBuisson

523 W. 6th Street, Suite 428  
Los Angeles CA 90014

**Tel:** (213) 785-1233

**Fax:** (213) 623-6716

**Email:** max@climateactionreserve.org

**Website:** www.climateactionreserve.org

**Year Established:** 2001

**# of Farm Projects:** 57

**# of Biogas Projects:** 194

The Climate Action Reserve is a national offsets program working to ensure integrity, transparency and financial value in the U.S. carbon market. It does this by establishing regulatory-quality standards for the development, quantification and verification of greenhouse gas (GHG) emissions reduction projects in North America; issuing carbon offset credits known as Climate Reserve Tonnes (CRT) generated from such projects; and tracking the transaction of credits over time in a transparent, publicly-accessible system. Adherence to the Reserve's high standards ensures that emissions reductions associated with projects are real, permanent and additional, thereby instilling confidence in the environmental benefit, credibility and efficiency of the U.S. carbon market. The Livestock Project Protocol and Organic Waste Digestion Protocol allow for the generation of credits by projects that install new biogas control systems to digest livestock manure, MSW food waste, and certain other agro-industrial wastewater streams. There is also a version of the Livestock protocol for use in Mexico, and one under development for Canada.

### Davenport Finance Company

E. Baker Davenport

11 South 12th Street, Suite 200  
Richmond VA 23219

**Tel:** (804) 323-6061

**Fax:** (703) 832-0773

**Email:** baker.davenport@davenportfinance.com

**Website:** www.davenportfinance.com

**Year Established:** 1999

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Davenport Finance Company is an equipment leasing company specializing in the financing of energy projects. DFC delivers innovative and flexible financial products and structures to serve the needs of end-use customers and help them improve productivity and cash flow. Targeted projects include BOOM (Build, Own, Operate, Maintain) transactions for chilled water, steam, onsite power, and water treatment facilities as well as Power Purchase Agreements for landfill gas, biomass, solar, wind and geothermal. Depending upon the scope of work, terms up to 30 years may be available.

### Edgewood Holdings

Durrell Mack

457 Cider Mill Road  
Cornwall VT 05753

**Tel:** (802) 462-3483

**Fax:** (802) 462-3217

**Email:** mack@edgewoodholdings.com

**Website:** edgewoodholdings.com

**Year Established:** N/A

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Edgewood is a private equity firm that finances biogas projects.

### Environmental Credit Corp.

Sharad Deshpande

1070 Cleveland Avenue  
Batavia IL 60510

**Tel:** (630) 326-9299

**Fax:** N/A

**Email:** sharaddesh@hotmail.com

**Website:** www.envcc.com

**Year Established:** 2005

**# of Farm Projects:** 50+

**# of Biogas Projects:** 50+

ECC partners with farmers to build and operate lagoon covers and biogas systems to reduce greenhouse gas emissions and create renewable energy. By covering the existing lagoons, two sources of revenues are created-renewable energy and carbon credits. In most cases, ECC pays for installation and operation of the system.



## Financing Specialists

### Everest Financial Network

Lee Burnett

5668 Red Fern Court, Suite 300  
Littleton CO 80125

**Tel:** (303) 948-9999  
**Fax:** (303) 948-2242  
**Email:** leeburnett@e-f-n.com  
**Website:** www.e-f-n.com

**Year Established:** 2001  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Everest and its affiliates have arranged over \$3 billion of agriculture, municipal and commercial funding. We are seeking opportunities for the development of integrated manure wastewater processing systems. Project and term financing is available including both hard and soft costs. Thus, financing is available for anaerobic digesters, gensets, loaders, piping, pumps, power inverters, and engineering and consulting expenses. We are eager to assist in arranging the optimum blend of private and public financing for the installation.

### First Capital Risk Management, LLC

Will Babler

11380 Dandar Street  
Galena IL 61036

**Tel:** (815) 777-1129  
**Fax:** (815) 777-3308  
**Email:** wbabler@firstcapitalrm.com  
**Website:** www.firstcapitolrm.com

**Year Established:** 1989  
**# of Farm Projects:** 3  
**# of Biogas Projects:** 3

First Capitol is a commodity trading and risk management firm that specializes in agricultural, energy and environmental commodities. First Capitol provides its clients with the opportunity to profit by participating in the greenhouse gas emissions trading market. As a registered aggregator of the Chicago Climate Exchange (CCX), First Capitol facilitates the verification, management and trading of carbon offset credits.

### Integrys Energy Services, Inc.

Ted Calvin

1001 Fannin, Suite 1150  
Houston TX 77002

**Tel:** (713) 580-4943  
**Fax:** (713) 358-0499  
**Email:** eacalvin@integrysenergy.com  
**Website:** N/A

**Year Established:** 2008  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Integrys Energy Services, Inc. provides project financing for renewable and clean energy projects. We assist developers in marketing and obtaining off take of electricity, RECs, and pipeline quality gas.

### MBS and Associates

Michael Shor

1100 Woodcliff Drive  
Alexandria VA 22308

**Tel:** (571) 338-8737  
**Fax:** (703) 739-7672  
**Email:** mbs.glis@cox.net  
**Website:** N/A

**Year Established:** N/A  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Integrator for renewable energy.

### Meridian Capital Investments, Inc.

Gino Hellizer

10220 River Road  
Potomac MD 20854

**Tel:** (301) 983-5000  
**Fax:** (301) 983-9012  
**Email:** info@meridianinvestments.com  
**Website:** www.meridianinvestments.com

**Year Established:** 1988  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** 2

Meridian Investments is the largest provider of tax credit equity in America. Since 1992, the company has underwritten over \$8 billion worth of federal tax credits. Meridian Investments has experience in all major federal tax credit programs, including sections 42, 29, and 45. The company provides information on selling credits to clients with plants that currently generate or will be generating a qualifying fuel under section 29 or 45 of the IRC.



## Financing Specialists

### NativeEnergy, Inc.

Brian Killkelley

30 Kimball Avenue, Suite 301

S. Burlington VT 05403

**Tel:** (802) 861-7707

**Fax:** (802) 861-7717

**Email:** brian.killkelley@nativeenergy.com

**Website:** www.nativeenergy.com

**Year Established:** 2001

**# of Farm Projects:** 6

**# of Biogas Projects:** 1

NativeEnergy, Inc. is a U.S. marketer of carbon credits and renewable energy credits. NativeEnergy directly sources from qualified renewable energy projects including wind, farm based anaerobic digesters, and landfill gas, typically under long term forward purchase contracts. The resulting carbon offsets and RECs are sold to business customers and individuals.

### Sterling Planet

Doug Mitchell/Tim Swanson

3500 Parkway Lane, Suite 500

Norcross GA 30092

**Tel:** (678) 650-7500

**Fax:** (678) 325-3174

**Email:** dmitchell@sterlingplanet.com

**Website:** www.sterlingplanet.com

**Year Established:** 2000

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Sterling Planet is a national leader in retail sales of renewable energy, both in the regulated and voluntary markets. As the nation's leading retail Renewable Energy Certificate (REC) provider, Sterling Planet supports hundreds of renewable projects nationwide.

Sterling Planet was the first company to offer RECs to every U.S. home and business as a way to support sustainable energy production that benefits the environment, the economy and society in general. We also help utilities develop green pricing programs for their customers, manage their REC portfolios, and sell their excess RECs to other utilities or purchase RECs to satisfy their own voluntary or mandated portfolio requirements.

By leveraging our ten years of experience and expertise in REC markets, Sterling Planet can manage the full cycle of project documentation, fulfillment, tracking and delivery – allowing generators to focus on their core business.

### Vermont Energy Investment Corporation

Paul Scheckel

244 South Champlain St

Burlington VT 5401

**Tel:** (802) 456-7097

**Fax:** (802) 658-1643

**Email:** scheckel@sover.net

**Website:** www.veic.org

**Year Established:** 1989

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Vermont Energy Investment Corporation (VEIC) focuses on financing programs related to energy efficiency. VEIC is looking for ways to participate with the state of Vermont's project to initiate a farm-based methane digester program.

## Manufacturers/Distributors of Covers

### COMANCO

Artemas Larry Holmes III

4301 Sterling Commerce Dr.

Plant City FL 33566

**Tel:** (813) 988-8829

**Fax:** (813) 988-8779

**Email:** lholmes@comanco.com

**Website:** www.comanco.com

**Year Established:** 1989

**# of Farm Projects:** 25

**# of Biogas Projects:** 14

COMANCO specializes in the fabrication and installation of geosynthetic membranes associated with covered lagoons and anaerobic digesters in addition to various other waste and wastewater related applications. COMANCO operates from offices located in Florida, California, Louisiana, Nevada and Ohio.



## Manufacturers/Distributors of Covers

### Dennis Gerber, Consultant

Dennis Gerber  
15870 Rose Avenue  
Los Gatos CA 95030

**Tel:** (408) 395-9020  
**Fax:** (408) 395-9020  
**Email:** dhgerber@comcast.net  
**Website:** N/A

**Year Established:** N/A  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Mr. Gerber designs and installs anaerobic digester covers. His Gas Collecting Floating Cover design, which holds a U.S. Patent, is the de-facto standard for flexible membrane anaerobic digesters.

### EC Applications, Inc.

Christopher Fore  
700 E. Taft Ave, Suite 3  
Orange CA 92865

**Tel:** (714) 921-9848  
**Fax:** (866) 475-1225  
**Email:** cfore@biogascovers.com  
**Website:** www.biogascovers.com

**Year Established:** 2005  
**# of Farm Projects:** 12  
**# of Biogas Projects:** 2

EC Applications, Inc. (ECA) designs, supplies and installs geosynthetic materials (liners and covers) for use in agriculture biogas projects. With our more than 20 years of experience, ECA will deliver quality, service and value to every project.

### Engineered Textile Products

Carter Damp  
P.O. Box 7474  
Mobile AL 36670

**Tel:** (800) 222-8001  
**Fax:** (888) 222-8277  
**Email:** cdamp2@aol.com  
**Website:** www.etpinfo.com

**Year Established:** 1983  
**# of Farm Projects:** 13  
**# of Biogas Projects:** 20

Engineered Textile Products, Inc. manufactures and distributes lagoon covers. The company manufactured the covers for Martin's Farm, a swine farm with a covered lagoon in South Boston, Virginia, and Palmers Farm, a swine farm with a covered lagoon in Petite Jean Mt., Arkansas.

### Environmental Fabrics, Inc.

Dennis Shanklin  
85 Pascon Court  
Gaston SC 29053

**Tel:** (803) 551-5700  
**Fax:** (803) 551-5701  
**Email:** N/A  
**Website:** www.environmentalfabrics.com

**Year Established:** 1997  
**# of Farm Projects:** 5  
**# of Biogas Projects:** 17

Environmental Fabrics Inc. has manufactured covers for five farms, including: 1) Dowell Ramsey Farm, a swine farm in Nash County, North Carolina; 2) Gold 'N Plump Poultry, a poultry farm in Cold Springs, Minnesota; 3) Pelican Rapids, a farm in Pelican Rapids, Minnesota; 4) Apex Pork, a swine farm in Rio, Illinois; and 5) Barham Farms, a swine farm in Zebulon, North Carolina.

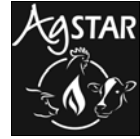
### Firestone Speciality Products Company

Jeffrey PanKonie  
310 East 96th Street  
Indianapolis IN 46024

**Tel:** (800) 428-4442  
**Fax:** (317) 575-7002  
**Email:** pankoniejeff@firestonesp.com  
**Website:** www.firestonebpco.com

**Year Established:** 1987  
**# of Farm Projects:** 20  
**# of Biogas Projects:** 2

Firestone Specialty Products manufactures a variety of EPDM and RPP geosynthetic products used within the agricultural arena. Firestone Specialty Products group has a well established network of independent installers familiar with agricultural applications throughout North America. Firestone geomembranes are engineered to provide dependable performance in a variety of critical containment applications such as livestock pit and ponds, lagoon covers and digester applications.



## Manufacturers/Distributors of Covers

### Geomembrane Technologies, Inc. (GTI)

Brennan Sisk  
P.O. Box 397  
Wolfeboro NH 03894

**Tel:** (506) 452-7304  
**Fax:** (506) 459-3954  
**Email:** bms@gticovers.com  
**Website:** www.gticovers.com

**Year Established:** 1979  
**# of Farm Projects:** 5  
**# of Biogas Projects:** >120

Since 1979, innovative designs have made Geomembrane Technologies one of the world's leading companies offering custom designed geomembrane covers. GTI designs, fabricates, installs, and maintains complete cover and liner systems for sites around the world. Projects include floating, modular, suspended, structurally supported, and gas handling systems for AG, municipal and industrial wastewater treatment plants, tanks, and lagoons. GTI also offers potable water covers.

### GeoPacific Lining

William Wolfe  
1300 Dexter Ave., N. #205  
Seattle WA 98109

**Tel:** (206) 284-2378  
**Fax:** (206) 283-7068  
**Email:** geopacific@cresmont.com  
**Website:** N/A

**Year Established:** 1994  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** 2

GeoPacific Lining performs feasibility assessments and consults farms on implementing digester systems, and is in the design phase of developing digesters for 3 farms in the U.S.

### Groth Corporation

Curtis Hanzalik  
13650 N. Promenade Blvd.  
Stafford TX 77477

**Tel:** (281) 295-6800  
**Fax:** (281) 295-6999  
**Email:** chanzalik@grothcorp.com  
**Website:** www.grothcorp.com

**Year Established:** 1967  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** 500+

Manufacturer of Anaerobic Digester Gas Control Equipment--Cover Equipment, Gas Handling/Safety Equipment, Waste Gas Burners/Flares.

### GSE Lining Technology, Inc.

Enrique Saavedra  
19103 Gundle Road  
Houston TX 77073

**Tel:** (281) 230-8655  
**Fax:** (281) 230-6739  
**Email:** esaavedra@gseworld.com  
**Website:** www.gseworld.com

**Year Established:** 1973  
**# of Farm Projects:** 150+  
**# of Biogas Projects:** 25+

Gundle/SLT Environmental, Inc. (GSE) is a leading manufacturer and marketer of geosynthetic lining products and services with a worldwide presence. For over 30 years, people around the world have looked to GSE products to make their projects easier and better. With an expansive line of geomembranes, geosynthetic clay liners, geonets, geocomposites, nonwoven geotextiles, concrete protection, and replicated grass turf products, GSE continues to develop solutions to meet our customers varying project requirements.

### Industrial & Environmental Concepts, Inc.

Mike Morgan  
6009 Chapel Drive  
Minneapolis MN 55439

**Tel:** (952) 829-0731  
**Fax:** (952) 829-9770  
**Email:** mmorgan@ieccovers.com  
**Website:** www.ieccovers.com

**Year Established:** 1989  
**# of Farm Projects:** 8  
**# of Biogas Projects:** 250

Industrial & Environmental Concepts, Inc. (IEC) produces and installs five types of floating modular covers for ponds and tanks. IEC's patented systems utilize a variety of geomembranes to provide cost-effective solutions to control problems with heat loss, odor, algae growth, and gas production in basins, ponds, lagoons, or tanks.



## Manufacturers/Distributors of Covers

### Layfield Environmental Systems Corporation

1166 Fesler St. Suite B  
El Cajon CA 92020

**Tel:** (619) 562-1200 /  
(800) 377-8404

**Fax:** (619) 562-1150

**Email:** sandiego@layfieldgroup.com

**Website:** www.layfieldgroup.com

**Year Established:** 1978

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Layfield has provided many years of service to Agriculture with pond liners, covers, baffle systems, and many other unique products.

### MPC Containment

Edward Reicin  
4834 South Oakley  
Chicago IL 60609

**Tel:** (773) 927-4120

**Fax:** (773) 650-6028

**Email:** ereic@aol.com

**Website:** www.mpccontainment.com

**Year Established:** 1923

**# of Farm Projects:** 50+

**# of Biogas Projects:** 20+

MPC Containment designs, fabricates, and installs floating-membrane liner systems, as well as other primary and secondary containment systems. The company also manufactures collapsible storage/pillow tanks for fuel, water, and waste.

### MT-ENERGIE USA, Inc.

Daniel Mann  
4915 Calloway Drive, Suite 102  
Bakersfield CA 93312

**Tel:** (661) 829-6900

**Fax:** (661) 829-6901

**Email:** biogas-us@mt-energie.com

**Website:** www.us.mt-energie.com

**Year Established:** 1995

**# of Farm Projects:** +140

**# of Biogas Projects:** +140

MT-ENERGIE USA, Inc. is a subsidiary of MT-ENERGIE Germany. MT-ENERGIE USA produces, installs and distributes covers for digester tanks. MT-ENERGIE Germany has more than 15 years of experience in the industry, completed more than 140 turnkey biogas facilities, and is one of the leading biogas companies in Europe. MT-ENERGIE Germany has subsidiaries in six European countries and in the United States.

### Raven Engineered Films

Greg Anderson  
1812 E Ave.  
Sioux Falls SD 57108

**Tel:** (800) 635-3456

**Fax:** (605) 331-0333

**Email:** greg.anderson@ravenind.com

**Website:** www.ravenind.com

**Year Established:** 1956

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Raven Engineered Films manufactures and fabricates polypropylene covers for agricultural, industrial and construction applications. We also manufacture railcar liners for the removal of hazardous waste from contaminated sites. Raven has distributors in all 50 States, Canada and Mexico as well as Europe and Australia.

### Reef Industries

Lynn Ciolli  
P.O. Box 750250  
Houston TX 77275

**Tel:** (800) 231-2417

**Fax:** (713) 507-4295

**Email:** ri@reefindustries.com

**Website:** www.reefindustries.com

**Year Established:** N/A

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Reef Industries manufactures and distributes covers for biogas systems.



## Manufacturers/Distributors of Covers

### Shand & Jurs, An L&J Technologies Co.

Michael Landato	<b>Tel:</b> (708) 236-6000	<b>Year Established:</b> 1922
5911 Butterfield Road	<b>Fax:</b> (708) 236-6006	<b># of Farm Projects:</b> 5
Hillside IL 60162	<b>Email:</b> mlandato@ljtechnologies.com	<b># of Biogas Projects:</b> 100+
	<b>Website:</b> www.ljtechnologies.com	

Shand & Jurs Biogas is a manufacturer of anaerobic digester cover and gas stream safety equipment including pressure and vacuum vents, flame arresters, sediment and drip traps, flame trap assemblies and waste gas burners.

### Varec Biogas

Regina M. Hanson	<b>Tel:</b> (714) 220-9924	<b>Year Established:</b> 1930
6101 Ball Rd., Suite 201	<b>Fax:</b> (714) 952-2701	<b># of Farm Projects:</b> 30+
Cypress CA 90630	<b>Email:</b> rhanson@varec-biogas.com	<b># of Biogas Projects:</b> 1000+
	<b>Website:</b> www.varec-biogas.com	

Varec Biogas is the world's leading supplier of gas handling and safety equipment to the Biogas Industry with countless installations in municipal and industrial wastewater treatment plants, and sanitary landfills. The wide range of equipment produced by Varec Biogas includes a comprehensive range of digester cover equipment, inline safety and pressure regulation devices, as well as Varec flare systems, which are unsurpassed in their reliability and flexibility. Varec Biogas has been meeting and exceeding the needs of our customers for over 75 years. With our history of innovation and industry leadership, it is no wonder that people turn to Varec Biogas to for the supply of gas safety equipment in on-farm biogas recovery systems.

### WesTech Engineering, Inc.

Matthew J. Williams	<b>Tel:</b> (801) 290-1191	<b>Year Established:</b> 1972
3625 S. West Temple	<b>Fax:</b> N/A	<b># of Farm Projects:</b> N/A
Salt Lake City UT 84115	<b>Email:</b> mwilliams@westech-inc.com	<b># of Biogas Projects:</b> >250
	<b>Website:</b> www.westech-inc.com	

WesTech, an employee-owned company, supplies process equipment for water, wastewater and industrial applications worldwide. Specific to anaerobic digestion, WesTech's DuoSphere gasholders and covers, and our Extreme Duty Digester Mixers provide durable and reliable solutions. WesTech has grown to become one of the major suppliers in the process equipment industry today.

## Manufacturers/Distributors of Engines

### Capstone Turbine Corporation

Rene M. Flores	<b>Tel:</b> (818) 734-5300	<b>Year Established:</b> 1984
21211 Nordhoff Street	<b>Fax:</b> (818) 734-5385	<b># of Farm Projects:</b> >10
Chatsworth CA 91311	<b>Email:</b> rflores@capstoneturbine.com	<b># of Biogas Projects:</b> >50
	<b>Website:</b> www.microturbine.com	

Capstone manufactures microturbines that can burn biogas with as little as 35 percent methane content. The currently available biogas model is a 30-kW microturbine that was initially offered for natural gas, propane, oil field waste gas, and diesel. During early 2000, a demonstration test program was conducted with Los Angeles County Sanitation Districts at Puente Hills landfill and at Palmdale wastewater treatment plant. Successful testing during 2000 led to commercial operations at 20 biogas facilities, as of March, 2002, using a total of 117 Capstone microturbines. The Capstone microturbine achieves a combustion efficiency of 99.999 percent. The patented premix combustion system is uniquely designed to reduce emissions of NOx, CO, and hydrocarbons to extremely low levels.



## Manufacturers/Distributors of Engines

### Caterpillar, Inc.

Rob Schueffner  
PO Box 610; AC6109  
Mossville IL 61525

**Tel:** (309) 578-6376  
**Fax:** (309) 578-7302  
**Email:** schuerd@cat.com

**Website:** www.cat.com/products/

**Year Established:** 1928  
**# of Farm Projects:** 200  
**# of Biogas Projects:** 50

For more than 75 years, Caterpillar, Inc. has been building the world's infrastructure. In partnership with Caterpillar dealers, it is driving sustainable change in every continent. A Fortune 100 company, Caterpillar is the world's leading manufacturer of construction and mining equipment, diesel and natural gas engines, and industrial gas turbines. The company is a technological leader in construction, transportation, mining, forestry, energy, logistics, electronics, financing, and electric power generation.

### CEC Consultants

John Puskar  
6907 Brookpark Road  
Cleveland OH 44129

**Tel:** (216) 749-2992  
**Fax:** (216) 398-8403  
**Email:** cec@apk.net

**Website:** www.cec-consultants.com

**Year Established:** 1986  
**# of Farm Projects:** 2  
**# of Biogas Projects:** 4

CEC is a distributor for Jasper's alternative fuel automotive derivative packaged engine systems. CEC distributed the engine for 2 farm-scale biogas projects.

### CENERGY Power Systems Technologies, Inc.

Michael J. Turwitt  
151 College Drive - 15  
Orange Park FL 32065

**Tel:** (904) 579-3217  
**Fax:** (904) 406-8727  
**Email:** mturwitt@2g-cenergy.com

**Website:** www.2g-cenergy.com

**Year Established:** 1995  
**# of Farm Projects:** 800+  
**# of Biogas Projects:** 600+

CENERGY Power Systems Technologies Inc. is a US Corporation owned by the manufacturer 2G Bio-Energy Technology Corporation (2G Bio-Energetechnik AG) Germany. The company's CHP cogeneration power plants guarantee extreme high energy efficiency, extracted and generated from biogas, landfill gas, sewage gas, coal mine gas, natural gas, and bio diesel. CENERGY offers integrated and commercially attractive solutions, highly efficient power plants for the profitable utilization of renewable energy resources. As leading manufacturer 2G-CENERGY provides technologically advanced and clean systems to generate electricity and heat, while reducing CO2 emissions and greenhouse gases. All plants are designed and manufactured "connection-ready". More than 1000 CHP power plants have been installed in various countries.

### CGP Resources, LLC

Peter J. Gallegos  
4705 Tile Line Road  
Crystal Lake IL 60012

**Tel:** (815) 479-9329  
**Fax:** (815) 477-9681  
**Email:** gallegospeter@sbcglobal.net

**Website:** www.tedom.com

**Year Established:** 1991  
**# of Farm Projects:** 33  
**# of Biogas Projects:** 80

Production of gas generator sets and cogeneration based on combustion engines. Manufacture of combustion engines for stationary application for natural gas and biogas.



## Manufacturers/Distributors of Engines

### Charles Equipment Company

Bob Conway		<b>Tel:</b> (630) 834-6000	<b>Year Established:</b> 1960
P.O. Box 388		<b>Fax:</b> (630) 543-4174	<b># of Farm Projects:</b> 8
Addison	IL 60101	<b>Email:</b> bob.conway@charlesequipment.com	<b># of Biogas Projects:</b> 100+
<b>Website:</b> www.charlesequipment.com			

Charles Equipment Company supplies engines, generator sets, controls, switches and switchgear, and cooling systems for LFGTE projects. It also provides custom design services and furnishes operating cost studies, layouts, and specifications.

### Coffman Electrical Equipment

Greg Mulder		<b>Tel:</b> (616) 452-8708	<b>Year Established:</b> 1947
3300 Jefferson SE		<b>Fax:</b> (616) 452-1337	<b># of Farm Projects:</b> 7
Grand Rapids	MI 49548	<b>Email:</b> gmulder@steadypower.com	<b># of Biogas Projects:</b> 7
<b>Website:</b> www.steadypower.com			

We are a distributor of a Variety of Biogas Generators and Micro-turbines. We are also work as a consultant in directing you to best possible digester design for maximum generation capability. We also offer a variety of gas scrubbing and material Drying systems.

### Coffman Geosciences

Laura E. Coffman, R.G.		<b>Tel:</b> (615) 594-8657	<b>Year Established:</b> 2002
2050 East Wayland		<b>Fax:</b> N/A	<b># of Farm Projects:</b> 3
Springfield	MO 65804	<b>Email:</b> lec56mail-GC@yahoo.com	<b># of Biogas Projects:</b> 4
<b>Website:</b> N/A			

Coffman Geosciences provides renewable energy consulting services to agricultural producers, food processors, ethanol developers and other producers of organic waste streams. CG has also patented a novel method for media placement in high-rate, suspended growth anaerobic digestion systems. CG also offers small scale, containerized AD systems to waste producers with smaller operations. Other services offered include AD feasibility studies, system planning and project management.

### Curtis Engine & Equipment, Inc.

Tony Jannotta		<b>Tel:</b> (240) 472-7766	<b>Year Established:</b> 1946
3920 Vero Road, Suite 1		<b>Fax:</b> (240) 209-0776	<b># of Farm Projects:</b> 2
Baltimore	MD 21227-1516	<b>Email:</b> ajannotta@curtisengine.com	<b># of Biogas Projects:</b> 8
<b>Website:</b> www.curtisengine.com			

We sell, service, and maintain bio-gas reciprocating engines; and we develop bio-gas projects on a turn-key basis.

### Enerflex Energy Services

Jim Jodice		<b>Tel:</b> (303) 373-8100	<b>Year Established:</b> 1968
11151 E. 51st Ave.		<b>Fax:</b> (303) 373-0115	<b># of Farm Projects:</b> N/A
Denver	CO 80239	<b>Email:</b> jjodice@enerflex.com	<b># of Biogas Projects:</b> 6
<b>Website:</b> www.enerflex.com			

Distributor for Waukesha Engines and Generator packages. Manufacturer of customer power generation and gas compression packages.



## Manufacturers/Distributors of Engines

### Energy and Power Solutions

Shiva Subramanya  
150 Paularino Avenue  
Costa Mesa CA 92626

**Tel:** (914) 957-1087  
**Fax:** (914) 957-1093  
**Email:** shivas@energynpower.com  
**Website:** www.energynpower.com

**Year Established:** 2001  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Design, construction, installation, financing, operation and maintenance of cogeneration systems. EPS delivers financially compelling solutions to complex energy and power issues. We work with the customer to develop, understand and manage their energy costs and profile. EPS skills in each key element of the total energy picture: energy pricing, delivery and finance; intelligent project development; experienced project installation and commissioning; and comprehensive operations and maintenance, enable us to present a complete energy solution.

### FlexEnergy, Inc.

Gary Joubert  
9601 Irvine Center Drive  
Irvine CA 92618

**Tel:** (949) 428-3841  
**Fax:** (949) 450-0567  
**Email:** gary.joubert@flexenergy.com  
**Website:** www.flexenergy.com

**Year Established:** 2001  
**# of Farm Projects:** 1  
**# of Biogas Projects:** 5

FlexEnergy is developing the Flex-Microturbine® to expand the range of biomass-derived gases that can be converted to electricity. Proof-of-concept testing was successful, and several prototype units are currently being built for testing on dairy digester gas, landfill gas, and producer gas from wood and nutshell gasification. Flex-Microturbine accepts gases at atmospheric pressure. This technology will be commercially available in two years.

### Ingersoll Rand

Holly Emerson  
800A Beaty Street  
Davidson NC 28036

**Tel:** (704) 655-4051  
**Fax:** (704) 655-4327  
**Email:** holly\_emerson@irco.com  
**Website:** www.energy.ingersollrand.com

**Year Established:** 1873  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Ingersoll-Rand EcoWorks microturbine systems turn digester gas into economical electricity and useful hot water. These compact, integrated cogeneration packages substantially reduce NOx emissions and odors associated with flaring. IR's unique solution includes a fuel conditioner to compress and clean the biogas for reliable long-term operation at very low O&M costs.

### Inland Power Group

Jon Going  
210 Alexandra Way  
Carol Stream IL 60197-5942

**Tel:** (262) 285-5562  
**Fax:** N/A  
**Email:** jgoing@inlandpowergroup.com  
**Website:** www.inlandpowergroup.com

**Year Established:** 1958  
**# of Farm Projects:** 2  
**# of Biogas Projects:** 20

Inland Power Group is the Midwest Distributor of GE Jenbacher gas engines. Jenbacher products, ranging from 330 kWe to 3 MWe, are highly developed and tested, and well matched to each customer's specific requirements. Our scope of delivery comprises generator sets for on-site power generation and cogeneration systems for decentralized power and heat supply. Both power systems are also available as fully containerized plants for maximum flexibility.



## Manufacturers/Distributors of Engines

### Kraft Power

Tom Rodgers

519 W. Second Street

Gaylord MI 49735

**Tel:** (866) 713-2152

**Fax:** (989) 748-4042

**Email:** trodgers@kraftpower.com

**Website:** www.kraftpower.com

**Year Established:** 1965

**# of Farm Projects:** N/A

**# of Biogas Projects:** 48

Industrial Engine & Power Generation Sales & Service. Waukesha Engine Distributor.

### Martin Machinery, LLC

Marcus R. Martin

39425 Excelsior Drive

Latham MO 65050

**Tel:** (660) 458-7000

**Fax:** (660) 458-7100

**Email:** mmartin@martinmachinery.com

**Website:** N/A

**Year Established:** 1977

**# of Farm Projects:** 35

**# of Biogas Projects:** 37

Martin Machinery first entered the biogas industry in 1982 with the design and construction of 850-kW switch gear to parallel an induction generator to the utility. Additionally, the company supplies electric biogas generator systems 50 to over 1,000 kw. In 2004 Martin Machinery started the company GEN-TEC LLC to build Utility Paralleling gear and the Custom Designed Paralleling Switch Gear. The company currently custom designs new and rebuilt electric generator systems to operate using biogas. It also services biogas units powered by engines with 460-cubic-inch to 7,040-cubic-inch engine blocks.

### MWM of America, Inc.

Derek Neill

1750 Breckinridge Parkway, Suite 500

Duluth GA 30096

**Tel:** (716) 238-4417

**Fax:** (770) 29-6719

**Email:** derek.neill@mwm.net

**Website:** www.mwm.net

**Year Established:** 1871

**# of Farm Projects:** 300+

**# of Biogas Projects:** 800+

MWM of America, Inc. is a leading manufacturer of high efficient gas engines for power generation. Having over 100 years experience, we specialize in biogas, natural gas, landfill, coal bed methane and syngas applications. Our products range from 400kW to 4MW. MWM of America, Inc., provides full service capabilities and project management in all States for "Gas to Wires" solutions.

### Nixon Energy Solutions

Leo LeBlanc

14300 South Lakes Dr.

Charlotte NC 28273

**Tel:** (704) 588-1043

**Fax:** (704) 588-8373

**Email:** lleblanc@nixonpower.com

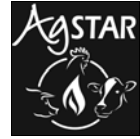
**Website:** www.nixonpower.com

**Year Established:** 1945

**# of Farm Projects:** 5

**# of Biogas Projects:** 10

Nixon Energy Solutions is the exclusive distributor for GE Jenbacher power generation equipment and services in the Southeastern and Mid-Atlantic U.S. From totally turnkey to selectively customize, Nixon Energy Solutions specializes in making the most of every Methane-to-Energy opportunity. Unsurpassed resources, experience and integrity have helped Nixon set the gold standard in power generation equipment and service for more than 50 years. Let us show you the Green Power potential in your landfill.



## Manufacturers/Distributors of Engines

### Northeast Energy Systems

Fred Farrand  
8330 State Road  
Philadelphia PA 19136

**Tel:** (215) 335-5010  
**Fax:** (215) 335-2163  
**Email:** ffarrand@neesys.com  
**Website:** www.neesys.com

**Year Established:** 1994  
**# of Farm Projects:** 2  
**# of Biogas Projects:** 16

Northeast Energy Systems is GE Energy's authorized distributors for Jenbacher gas engine systems throughout the northeastern United States and the Caribbean region. Focused exclusively on gaseous fueled engine and power generation systems, NES provides comprehensive application, sales engineering, systems integration and parts and service capabilities.

### SDP Energy, LLC

Hank Leibowitz  
5031 Birch Street, Suite J  
Newport Beach CA 92660

**Tel:** (925) 498-2501  
**Fax:** (925) 498-2520  
**Email:** hleibowitz@sdpenergy.com  
**Website:** www.sdpenergy.com

**Year Established:** 2005  
**# of Farm Projects:** 1  
**# of Biogas Projects:** 2

Turnkey supplier of Biogas cogeneration systems based on MAN reciprocating engines. Package includes fully enclosed cabinet and hot water system for the anerobic digester or other uses.

### TEDOM s.r.o.

LubosNedvedicky  
Vycapy 195, Trebic 674 01  
Czech Republic

**Tel:** +420-568-837-111  
**Fax:** +420-568-837-100  
**Email:** nedvedicky@tedom.cz  
**Website:** www.tedom.eu

**Year Established:** 1991  
**# of Farm Projects:** 33  
**# of Biogas Projects:** 80

Production of gas generator sets and cogeneration based on combustion engines. Manufacture of combustion engines for stationary application for natural gas and biogas.

### US Energy Services (USES)

Jeff Sarrett  
8245 E. Bell Road, Suite #132  
Scottsdale AZ 85260

**Tel:** (480) 661-1534  
**Fax:** (480) 452-0238  
**Email:** jsarrett@usenergyservices.net  
**Website:** N/A

**Year Established:** 1999  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** 5

US Energy Services (USES) provides design/build services for the construction of and/or ownership of clean energy power generation systems. The industries served include, but are not limited to landfill gas, waste water treatment facilities, agriculture and live stock entities, and food waste. Our design/build projects typically combined the design and construction process into a single contract, which results in better Client control, expedited construction, reduced costs and faster return on investment. For our build-own-operate projects this allows USES to reduce its internal construction cost which in turn enhances the "no out-of-pocket" program by supplying energy at a reduced cost to our Client.

### Western Energy Systems

Steve Hall / Garrett Smith  
499 Nibus Street, Unit B  
Brea CA 92821

**Tel:** (714) 529-9700  
**Fax:** (714) 529-9700  
**Email:** shall@weesys.com  
**Website:** www.weesys.com

**Year Established:** 1994  
**# of Farm Projects:** 2  
**# of Biogas Projects:** 16

Western Energy Systems is GE Energy's authorized distributors for GE/Jenbacher gas engine systems throughout California, Oregon, Alaska, and Hawaii. Focused exclusively on gaseous fueled engine and power generation systems, NES provides comprehensive application, engineering, systems integration, maintenance, and parts and service capabilities.



## Manufacturers/Distributors of System Components

### Advanced Systems Technologies, Inc. (ASTI)

Terry R. Schartel

**Tel:** (610) 682-0610

**Year Established:** 1983

P.O. Box 298

**Fax:** (610) 682-0605

**# of Farm Projects:** N/A

Mertztown PA 19539

**Email:** CABatASTI@aol.com

**# of Biogas Projects:** N/A

**Website:** [www.advancedsystemstechnologies.com](http://www.advancedsystemstechnologies.com)

Advanced Systems Technologies, Inc., (ASTI) designs and fabricates process control systems, specializing in industrial gas handling, blending, generating and purifying systems, biogas and fuel blending/mixing systems. ASTI's mission is to provide at reasonable prices, high quality engineering design services and fabricated systems to industrial gas manufacturers and end users throughout the world. ASTI can enter a project at any point: from complete turnkey systems specification through fabrication, installation and startup, to simple fabrication from customer supplied prints and specifications.

### Air Products and Chemicals, Inc.

John Hoffmann

**Tel:** (314) 995-3361

**Year Established:** 1940

11444 Lackland Road

**Fax:** (314) 995-3500

**# of Farm Projects:** 14

Saint Louis MO 63146

**Email:** [hoffmaje@airproducts.com](mailto:hoffmaje@airproducts.com)

**# of Biogas Projects:** 20

**Website:** [www.airproducts.com](http://www.airproducts.com)

Air Products offers a broad portfolio of gas products, technologies, and engineering expertise that can help improve the productivity, economics, and safety of many bioenergy processes. Whether you are involved with an existing operation or developing a new project, we can help. As one of the world's leading suppliers of oxygen, nitrogen, hydrogen, and other industrial gases, we can apply our know-how in combustion and gasification, cryogenics, gas clean-up and separations, power generation, and process optimization.

Our Prism Membrane modules employ hollow fiber membranes which selectively separate methane from carbon dioxide molecules, providing a robust and dependable method of upgrading biogas streams to high purity methane.



## Manufacturers/Distributors of System Components

### American Refining Group, Inc.

Kenneth M. Tyger	<b>Tel:</b> (814) 368-1210	<b>Year Established:</b> 1881
77 North Kendall Avenue	<b>Fax:</b> (814) 368-1328	<b># of Farm Projects:</b> 13
Bradford PA 16701	<b>Email:</b> ktyger@amref.com	<b># of Biogas Projects:</b> 1
	<b>Website:</b> www.amref.com	

American Refining Group, Inc., manufacturers of Brad Penn® Lubricants. The American Refining Group, Inc. (formerly the Kendall Refinery), located in Bradford, Pennsylvania is the oldest continuously running lube refinery in the world and the only fully integrated major refinery that processes 100% Pennsylvania Grade Crude Oil. In addition to producing a wide range of lubricants, we are proud to be the manufacturer of the Brad Penn® Biogas Engine Oils, specifically designed and tailored for use in engines fueled by biogas generated from anaerobic digestion of manure, compost or landfill residue. The Brad Penn® Biogas Engine Oils ( High Ash 15 TBN (Total Base Number) / Medium Ash 8.9 TBN) were developed in the Spring of 2009 in response to inquiries from a number of PA/NY dairy farms employing anaerobic digesters to fuel stationary gas engines for on-site cogeneration of heat and power. Because of the very corrosive nature of this gas, the farms were finding it necessary to use railroad diesel engine oils of 10 TBN or higher to neutralize the acids produced when burning biogas containing high levels of hydrogen sulfide. During our conversations with these farms we learned that conventional stationary gas engine oils designed for use in engines fueled by natural gas or marginally 'sour' landfill gas typically did not have sufficient reserve alkalinity to provide the required engine protection or oil drain longevity our customers desired in their biogas fueled applications. Our Brad Penn® Biogas Engine Oils offer not only the sufficient levels of reserve alkalinity required to effectively neutralize acidic components generated by combustion of biogas, but also enhanced anti-wear and detergency to provide outstanding engine component protection as well as the potential for increased oil drain intervals. To date, the Brad Penn Biogas Oils are utilized at 13 farms ( 2 pending) in 4 different states. In all instances, significantly increased drain intervals have been accompanied by excellent engine protection as evidenced by engine wear metals profiles (via oil analysis) that remained consistently low and virtually unchanged throughout the entire testing period. Our research shows installation of these anaerobic digesters is expanding rapidly throughout the United States.

### Bio-Methatech Canada, Inc.

Michael Brown	<b>Tel:</b> (514) 589-3003	<b>Year Established:</b> 2006
85 St-Paul West, Montreal	<b>Fax:</b> (514) 847-1125	<b># of Farm Projects:</b> N/A
Quebec, Canada H2Y 3V4	<b>Email:</b> mbrown@bio-methatech.com	<b># of Biogas Projects:</b> 500+
	<b>Website:</b> www.bio-methatech.com	

Bio-Methatech Canada Inc. is a renewable energy company that designs, builds, installs and supports the LIPP digester technology. The LIPP technology has over 35 years of operational experience and 500+ biogas systems in farming, food waste and municipal waste water industries in 80 countries worldwide. The LIPP patented construction process enables the automated and efficient installation of high-quality digester systems that have a long service life. The unique LIPP methanization technology allows for continuous and uninterrupted operation focused on maximizing the delivery of your system's various product revenue streams.

### Bioprocess Control AB

Kristofer Cook	<b>Tel:</b> +46(0)46163950	<b>Year Established:</b> 2006
Scheelevagen 22	<b>Fax:</b> N/A	<b># of Farm Projects:</b> 1+
223 63 Lund Sweden	<b>Email:</b> kc@bioprocesscontrol.com	<b># of Biogas Projects:</b> 4+
	<b>Website:</b> www.bioprocesscontrol.com	

Bioprocess Control provides supervisory and control applications that optimise the production of biogas. Our prize winning flagship product Biogas Optimizer increases the profitability of biogas producers by: (1) increasing the amount and stability of gas production; (2) protecting the process from disturbances; (3) reducing the amount of time spent on process monitoring.



## Manufacturers/Distributors of System Components

### Clear Water Technologies, Inc.

Tim France	<b>Tel:</b> (763) 783-7344	<b>Year Established:</b> 1986
7800 Main Street	<b>Fax:</b> (763) 571-3372	<b># of Farm Projects:</b> 3
Minneapolis MN 55432	<b>Email:</b> admin@CWTIUSA.com	<b># of Biogas Projects:</b> 4
	<b>Website:</b> www.CWTIUSA.COM	

Provides a patented process which eliminates the hydrogen sulfide while increasing the methane generated in the anaerobic digester. The process also reduces the amount of sludge.

### Conserval Systems, Inc.

Bob Rose	<b>Tel:</b> (716) 835-4903	<b>Year Established:</b> 1990
4242 Ridge Lea Road, Unit 28	<b>Fax:</b> (716) 835-4904	<b># of Farm Projects:</b> 50
Buffalo NY 14226	<b>Email:</b> infowallusa@solarwall.com	<b># of Biogas Projects:</b> 2
	<b>Website:</b> www.solardrying.com	

Conserval produces a solar drying system to dry manure. The Solarwall panels heat air which is passed over the manure removing the moisture. Dried manure can then be sold as a fertilizer.

### Dresser ROOTS

Jim Wolford	<b>Tel:</b> (832) 590-2406	<b>Year Established:</b> 1850
16240 Port Northwest Drive	<b>Fax:</b> (832) 590-2326	<b># of Farm Projects:</b> N/A
Houston TX 77041	<b>Email:</b> roots@dresser.com	<b># of Biogas Projects:</b> N/A
	<b>Website:</b> www.rootsblower.com	

Dresser ROOTS is a global supplier of rotary positive and centrifugal blowers and systems, operating two manufacturing locations, with factory authorized service locations worldwide. Dresser ROOTS produces air and gas moving equipment for a multitude of industries.

### FCI Fluid Components International

Randall J. Brown	<b>Tel:</b> (760) 744-6950	<b>Year Established:</b> 1964
1755 La Costa Meadows Dr.	<b>Fax:</b> (760) 736-6250	<b># of Farm Projects:</b> N/A
San Marcos CA 92078	<b>Email:</b> randyb@fluidcomponents.com	<b># of Biogas Projects:</b> N/A
	<b>Website:</b> www.fluidcomponents.com	

Leading manufacturer of gas flow meters for digester gases, bio-gas, and all fuel gases for applications in Wastewater Treatment facilities, Landfills, farm waste-to-energy, ag-to-energy, etc.

### Flotech Services NA LTd.

Sean Mezei	<b>Tel:</b> (604) 805-8532	<b>Year Established:</b> 1986
#253-5489 Byrne Rd., Burnaby	<b>Fax:</b> N/A	<b># of Farm Projects:</b> 18
British Columbia, V5J 3J1	<b>Email:</b> sean.mezei@flotech.com	<b># of Biogas Projects:</b> 40
Canada	<b>Website:</b> www.flotech.com	

Flotech and its subsidiary Greenlane Biogas are the leading worldwide developer and supplier of technology for upgrading biogas to renewable natural gas for use in pipelines and vehicle fuel. Flotech has more than 20 years of experience upgrading biogas, with installations in Canada, France, Germany, Iceland, Japan, New Zealand, South Korea, Spain, Sweden and the US. Flotech's process uses a water scrubber process in combination with our proprietary PSA / TSA system to reliably deliver high quality biomethane. Flotech also backs up its systems with the most comprehensive guarantees available in the market.



## Manufacturers/Distributors of System Components

### Garrison Minerals, LLC

Mac McCreless

2054 Broadway

Denver

CO 80205

**Tel:** (720) 389-7609

**Fax:** (720) 889-9470

**Email:** mac@garrisonminerals.com

**Website:** www.garrisonminerals.com

**Year Established:** 2008

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Providing various chemicals for anaerobic digestion systems, specifically pH adjustment, (i.e., magnesium hydroxide, etc).

### Gas Technology Products

John Perry Dickson

846 East Algonquin Road - A100

Schaumburg

IL 60173

**Tel:** (847) 285-3873

**Fax:** (847) 285-3888

**Email:** JPD@merichem.com

**Website:** www.gtp-merichem.com

**Year Established:** 1978

**# of Farm Projects:** N/A

**# of Biogas Projects:** 42

LO-CAT is an H<sub>2</sub>S removal technology, where we use liquid iron redox to reduce hydrogen sulfide from gas streams (some as high as 99%), to pipeline specification (less than 1 ppm in some instances). This process is safe, uses non-toxic chemistries, proven (we have over 170 units worldwide), and very cost-effective (LO-CAT removal of H<sub>2</sub>S generally costs between \$0.10 to \$0.15 per pound of sulfur recovered), and is probably most effective in the 500 pound per day to 20 long tons per day (of sulfur recovered). We have several operating LO-CAT units in biogas environments, as well as in odor control (in similar environments). We do have solid media technologies in our possession (similar to iron sponge), but the economics of LO-CAT generally far outweigh these types of processes (in most cases). In addition to LO-CAT, we are in the final process of coming out with a technology called mini-CAT (which will target applications with less than 500 pounds per day of sulfur), which is based upon LO-CAT technology, but on a much simpler, smaller scale. This technology will operate with the same success of LO-CAT, at a sulfur recovery cost of approximately \$0.35 to \$0.45 per pound of sulfur recovered (the higher cost is due to different solid sulfur filtering technologies, which makes for a "wetter" cake in mini-CAT, and therefore, a relatively higher chemical demand rate). This cost level is still very much less than aerobic iron sponge, which generally operates at levels of \$1.15 to \$1.25 per pound of sulfur recovered. By the way, when we talk about sulfur recovery...the sulfur that is formed in the LO-CAT or mini-CAT process is solid, elemental sulfur, that is very suitable as an agricultural adjunct. We are truly a "green" technology, as we remove a toxin from the air, promoting the removal of a harmful greenhouse gas (methane), in a completely safe environment, producing a product that is very desired by the agricultural industry. In addition to sulfur removal, we have several other unique gas processing technologies.

### Guild Associates, Inc.

Mike Mitariten

5750 Shier-Rings Road

Dublin

OH 43016

**Tel:** (908) 752-6420

**Fax:** (614) 798-1972

**Email:** mike@moleculargate.com

**Website:** www.moleculargate.com

**Year Established:** 1980

**# of Farm Projects:** N/A

**# of Biogas Projects:** 3

Guild has several projects operating and offers the Molecular Gate PSA technology for the removal of water, CO<sub>2</sub> and H<sub>2</sub>S from biogas.

### HRS HEAT EXCHANGERS

Carlos Cobian

5035 N. 55th Avenue, Suite 6

Glendale

AZ 85301

**Tel:** (623) 913-4328

**Fax:** (623) 939-6168

**Email:** carlos@hrs-americas.com

**Website:** www.hrs-americas.com

**Year Established:** 2003

**# of Farm Projects:** N/A

**# of Biogas Projects:** 8

HRS Heat Exchangers manufactures and sells heat exchangers for biogas, sludge and thermal hydrolysis applications.



## Manufacturers/Distributors of System Components

### Infilco Degremont, Inc.

Jongmin Kim

8007 Discovery Drive

Richmond VA 23229

**Tel:** (804) 756-7623

**Fax:** (804) 756-7643

**Email:** jongmin.kim@infilcodegremont.com

**Website:** www.degremont-technologies.com

**Year Established:** 1894

**# of Farm Projects:** N/A

**# of Biogas Projects:** 300+

Infilco Degremont Inc. provides high-performance livestock waste treatment solutions for any size waste flow and virtually any influent condition. We're involved in every stage of a project – from process design to equipment supply to operations training. Careful evaluation of each application means our customers receive the most efficient combination of technology and products at the lowest overall cost. Our design engineers look at the entire treatment line to find ways to improve waste treatment efficiency, thus minimizing solids to be disposed and maximizing biogas generation to ensure faster return on investment. We also handle drinking water treatment and wastewater applications like primary, secondary, wastewater reuse, and stormwater management for municipalities around the country. Industries, too, benefit from our diverse solutions, including physical-chemical treatment, packed-bed demineralization, ion exchange, reverse osmosis, and aerobic/anaerobic biological systems.

### Innovative Environmental Products

Frank Miller

28 Main Street, PO Box 72

Livonia NY 14487

**Tel:** (585) 346-3789

**Fax:** (585) 346-9061

**Email:** FCMiller-IEP@rochester.rr.com

**Website:** www.iepworld.com

**Year Established:** 2001

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Innovative Environmental Products provides a patented process for the capture and control of manure nutrients in liquid manure pre or post digestion. The can achieve remarkable manure nutrient and solids reduction. Levels of removal of constituents from the manure in the filtrate: Phosphate – 98+% reduction; Organic Nitrogen – 90% reduction; Fecal Matter – 99% reduction; and Manure Solids – >95% reduction.

### INTEGRITY Ag Systems

Tim Rensch

4755 Innovation Way

Chambersburg PA 17201

**Tel:** (717) 261-5711

**Fax:** (717) 263-7399

**Email:** trensch@integrityagsystems.com

**Website:** www.integrityagsystems.com

**Year Established:** 2001

**# of Farm Projects:** 10

**# of Biogas Projects:** 10

INTEGRITY Ag Systems provides a wide array of customizable clean-tech products, equipment and solutions for cost-effective manure management. INTEGRITY systems help farmers reduce reliance on non-renewable fossil fuels through anaerobic digester and supporting technology. INTEGRITY systems help farmers more effectively protect surrounding watersheds from nutrient overloading and control odor for better community relations.

### John Zink Company, LLC

Aron Katz

11920 East Apache

Tulsa OK 74116

**Tel:** (918) 234 2764

**Fax:** (918) 234-1968

**Email:** biogas@johnzink.com

**Website:** www.johnzink.com

**Year Established:** 1929

**# of Farm Projects:** N/A

**# of Biogas Projects:** 700+

With more than 700 biogas flare systems in operation, it's no wonder John Zink Company is the leader in advanced landfill flare systems. We offer standard or custom landfill systems including enclosed, elevated, and rental systems, blower skirts, and our Ultra Low Emissions (ZULE) flare system which offers the lowest emissions and highest destruction efficiency available. John Zink also provides advanced technology for CDM and carbon credit projects in the landfill, waste water, and agricultural markets. We have engineering representatives, licensees, and distributors in more than 60 countries, and are able to manufacture and offer design and sales support locally for you.



## Manufacturers/Distributors of System Components

### Karl Dungs, Inc.

Erik Tate  
524 Apollo Drive  
Lino Lakes MN 55014

**Tel:** (651) 792-8919  
**Fax:** (651) 792-8912  
**Email:** etate@karldungsusa.com  
**Website:** www.dungs.com

**Year Established:** 1997  
**# of Farm Projects:** 6+  
**# of Biogas Projects:** 6+

Karl Dungs, Inc. is a wholly owned subsidiary of Karl Dungs GmbH, a German manufacturer of Gas Controls. Our product line consists of fuel supply controls, suitable for Bio Methane, including: Manual & Automatic Shut-off Valves, Gas Filters, Pressure Reducing & Zero Governor Regulators. Dungs can also supply "Pre-Engineered" value added fuel trains from 1" (DN25) - 8" (DN200). Inventory in the U.S. carrying UL/UR, FM, CSA, and/or CE approvals, suitable for NFPA37, UL2200, and/or CSA B149.1 & B149.3. We service North & South American markets.

### Komax Systems

Kevin Meyran  
15301 Graham Street  
Huntington Beach CA 92649

**Tel:** (203) 433-4385  
**Fax:** (203) 433-4396  
**Email:** kevin@komax.com  
**Website:** www.komax.com

**Year Established:** 1973  
**# of Farm Projects:** 20  
**# of Biogas Projects:** 20

Komax Systems, Inc. designs and manufactures the KLEAN-WALL™ Heat Exchanger, a non-clogging high efficiency sludge heat exchanger. The patented technology is based on Komax's proven Hi-Pass non-clogging static mixer designed specifically for sludge and heavy slurry applications. KLEAN-WALL™ heat exchangers are designed with contoured elements to maximize heat transfer while eliminating corners that can trap solid or fibrous materials. This highly turbulent flow creates a scavenging environment, continually cleaning the walls of the pipe for maximum heat transfer and yet allows solids to pass to a size 70% of the pipe diameter.

### Kompogas AG

W. Schmid  
Rohrstrasse 36  
Glattbrugg, Switzerland CH-8152

**Tel:** (411) 809-7100  
**Fax:** (411) 809-7110  
**Email:** info@kompogas.ch  
**Website:** www.kompogas.ch

**Year Established:** 1991  
**# of Farm Projects:** 3  
**# of Biogas Projects:** 30

Kompogas AG has developed an anaerobic process for the fermentation of biogenous yard and kitchen waste combined with energy production. Waste recycling using the Kompogas process offers numerous advantages. The end products obtained from the process include CO<sub>2</sub>-neutral renewable energy (biogas), as well as high-quality compost and liquid fertilizer. The biogas recovered provides energy in the form of heat, electric power, and vehicle fuel.



## Manufacturers/Distributors of System Components

### LANDTEC North America, Inc.

David Millan

850 S. Via Lata, Suite 112

Colton CA 92324

**Tel:** (909) 783-3636

**Fax:** (909) 825-0591

**Email:** [dmillan@ces-landtec.com](mailto:dmillan@ces-landtec.com)

**Website:** [www.landtecna.com](http://www.landtecna.com)

**Year Established:** 1982

**# of Farm Projects:** 5

**# of Biogas Projects:** 300+

The LANDTEC system is a comprehensive solution that begins with in-line gas flow measurement and sampling devices, includes portable gas analyzers, continuous stationary monitoring systems and world class analytical software. Decades of experience and field proven technology evolved into the means to maximize gas production and still maintain a healthy anaerobic process. Given the dynamic nature of biogas generation, constant evaluation of this process is necessary for success. The LANDTEC System provides the tools for this continuous cycle. The LANDTEC System expedites the process of submitting reports for:

- \* CDM Carbon Credit exchange
- \* Gas-to-Energy gas production
- \* Environmental Compliance

### Maintenance-free Exteriors

Ken Vaughn

P.O. Box 163974

Austin TX 78716

**Tel:** (800) 738-0000

**Fax:** (888) 360-9752

**Email:** [rhinoken@gmail.com](mailto:rhinoken@gmail.com)

**Website:** [www.rhinomembranes.com](http://www.rhinomembranes.com)

**Year Established:** 1992

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Authorized sales & installation of Rhino Membranes for in situ geomembrane pit, pond, lagoon & lake liners. Sales, design, build, renovate. We can do it for you or set you up to install your own monolithic liner. Corrosion prevention with Rhino Membranes, which are VOC free, sustainable & last forever. Free estimates.

### Modern Technology Methods, LLC

Billy Ivy

P.O. Box 3292, Thompson Bridge Road #276

Gainesville GA 30506

**Tel:** (404) 287-2624

**Fax:** (404) 287-2624

**Email:** [info@moderntechnologymethods.com](mailto:info@moderntechnologymethods.com)

**Website:** [www.moderntechnologymethods.com](http://www.moderntechnologymethods.com)

**Year Established:** 2009

**# of Farm Projects:** 3

**# of Biogas Projects:** 3

Modern Technology Methods, LLC, a 100% American owned company, offers turn key thermophilic anaerobic digestion systems designed to cleanly and efficiently convert chicken waste into high percentage methane (biogas) and fertilizer with commercial, industrial and agricultural applications.

### MWH Energy Solutions

Stephen Chippas

27755 Diehl Road

Warrenville IL 60556

**Tel:** (630) 836-8977

**Fax:** (630) 836-8959

**Email:** [EnergySolutions@mwhglobal.com](mailto:EnergySolutions@mwhglobal.com)

**Website:** [www.mwhglobal.com](http://www.mwhglobal.com)

**Year Established:** 2001

**# of Farm Projects:** 1

**# of Biogas Projects:** 5

MWH Energy Solutions has extensive experience in the recovery, cleaning, and combustion of biogas. This expertise includes wastewater treatment plants, landfills, and agricultural applications. MWH can provide complete turnkey services including planning, design, procurement, construction, financing, and O&M services.



## Manufacturers/Distributors of System Components

### NETZSCH Pumps North America, LLC

John Yacilla  
119 Pickering Way  
Exton PA 19341

**Tel:** (610) 363-8010  
**Fax:** (610) 363-0971  
**Email:** marketing@netsch.com  
**Website:** www.netschusa.com

**Year Established:** N/A  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

NETZSCH Pumps North America, LLC is the North American subsidiary of the globally operating group of NETZSCH companies. For over five decades NETZSCH has been manufacturing and supplying NEMO® Progressing Cavity Pumps and TORNADO® Rotary Lobe Pumps, screw pumps, macerators/grinders, dosing systems and accessory equipment for custom built and challenging solutions for your applications. As the world's market leader of Progressive Cavity Pumps our innovative, premium quality products are known and valued all over the world.

### Norton Environmental Equipment, Ltd.

Steven Viny  
6200 Rockside Woods Blvd.  
Independence OH 44131

**Tel:** (216) 447-0070  
**Fax:** N/A  
**Email:** sviny@daladgroup.com  
**Website:** N/A

**Year Established:** 2000  
**# of Farm Projects:** NA  
**# of Biogas Projects:** NA

Norton Environmental Equipment Company, Ltd. is the exclusive distributor for Komptech composting equipment in North America. Komptech's BFSC system is for digesting on-farm waste, including compost production and gas recovery. Several such systems have been installed and are operating successfully in Europe.

### Organic Waste Systems (OWS), Inc.

Norma McDonald  
7155 Five Mile Road  
Cincinnati OH 45230

**Tel:** (513) 535-6760  
**Fax:** (513) 233-3395  
**Email:** norma.mcdonald@ows.be  
**Website:** www.ows.be

**Year Established:** 1985  
**# of Farm Projects:** 4  
**# of Biogas Projects:** 28

OWS has two divisions: (1) laboratory services for biogas potential testing and biochemical monitoring, and (2) biogas plant design build services including dry, high solids digestion.

### Pneumatech, LLC

Jim Donohue  
4909 70th Avenue  
Kenosha WI 53144

**Tel:** (262) 658-4300  
**Fax:** (262) 658-1945  
**Email:** jdonohue@pneumatech.com  
**Website:** www.pneumatech.com

**Year Established:** 1966  
**# of Farm Projects:** 100+  
**# of Biogas Projects:** 100+

Manufacturer of Biogas dryers/treatments equipment.

### Pro-Act Biotech

Bill Donohue  
P.O. Box 345  
Warren RI 02885

**Tel:** (800) 772-3775  
**Fax:** (401) 633-6270  
**Email:** bd@proactbiotech.com  
**Website:** www.proactbiotech.com

**Year Established:** 1999  
**# of Farm Projects:** 100+  
**# of Biogas Projects:** N/A

Pro-Act Microbial, the leading supplier of bio-augmentation products, provides highly effective waste treatment systems for the concentrated animal feeding operation (CAFO) and the aquaculture industry.



## Manufacturers/Distributors of System Components

### ProSonix, LLC

Tom Podwell  
P.O. Box 26676  
Milwaukee WI 53226-0676

**Tel:** (800) 849-1130  
**Fax:** (800) 849-1130  
**Email:** tpodwell@pro-sonix.com  
**Website:** www.pro-sonix.com

**Year Established:** 2006  
**# of Farm Projects:** 2+  
**# of Biogas Projects:** N/A

ProSonix specializes in the design & manufacture of Direct Steam Injection heating solutions for water, slurry, sludge, & aggressive fluids. Our products are capable of handling difficult to pump fluids with high viscosity or high solids, and contain fibrous materials. We have expertise in Industrial & Municipal wastewater, Anaerobic Digestion, and Biogas recovery.

### Proteus Texas Power

Ken Kelley  
8101 SW 34th Avenue  
Amarillo TX 79121

**Tel:** (806) 354-4970  
**Fax:** (806) 354-4997  
**Email:** kkelley@jbkweb.com  
**Website:** www.jbkweb.com

**Year Established:** 1993  
**# of Farm Projects:** 1  
**# of Biogas Projects:** 2

Experts in natural gas transportation, marketing, project development.

### Renewable Carbon Management, LLC

Jim McNelly  
44 28th Avenue North, Suite J  
Saint Cloud MN 56303

**Tel:** (320) 253-5076  
**Fax:** (320) 253-4976  
**Email:** rcm@composter.com  
**Website:** www.composter.com

**Year Established:** 1975  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Since 1992, design and build in-vessel, containerized intermodal based digestion systems, aerobic and dry anaerobic with heat exchange, for managing a variety of biomass residuals, including wastewater treatment solids, manure, and food scraps.

### Ro-Flo Compressors, LLC

Dennis Wacker  
2611 E. Winslow Avenue  
Appleton WI 60004

**Tel:** (847) 421-4862  
**Fax:** (920) 574-2654  
**Email:** dwacker@roflocompressors.com  
**Website:** www.roflocompressors.com

**Year Established:** 2007  
**# of Farm Projects:** pending  
**# of Biogas Projects:** >300

Ro-Flo is a manufacturer and supplier of rotary vane compressors for methane recovery and processing systems around the globe.



## Manufacturers/Distributors of System Components

### Sage Metering, Inc.

Bob Steinberg  
8 Harris Ct. D-1  
Monterey

CA 93940

**Tel:** (831) 242-2030

**Fax:** (831) 655-4965

**Email:** bob@sagemetering.com

**Website:** www.sagemetering.com

**Year Established:** 2002

**# of Farm Projects:** 12

**# of Biogas Projects:** 36

Sage Metering, Inc. manufactures high performance NIST Traceable Thermal Mass Flow Meters for digester gas, biogas, and landfill gas. The popular Sage Prime Flow Meter is easy to install, and provides a display of instantaneous flow rate, totalized flow (consumption) and temperature; as well as 4-20 ma outputs of flow rate, pulsed outputs of totalized flow, and modbus® communication. Sage has many unique features and diagnostics, such as an in situ "field zero calibration check" that takes only 1 minute to check the sensor's performance, to verify that the sensor is clean, and to assure that there is no shift or drift in the flow meter. In addition, the Sage technology has tremendous sensitivity with negligible pressure drop, and hence can detect extremely low flow rates, typical of landfill gas and biogas applications. Sage Flow Meters feature a turn down of at least 100 to 1 with resolution of 1000 to 1.

### Siemens Building Technologies, Inc.

Patrick Weller

10775 Business Center Drive

Cypress

CA 90630

**Tel:** (714) 816-1442

**Fax:** (714) 252-1327

**Email:** patrick.weller@siemens.com

**Website:** www.siemens.com/buildingtechnologies

**Year Established:** 1891

**# of Farm Projects:** N/A

**# of Biogas Projects:** N/A

Siemens' track record for delivery on performance guarantees is unparalleled across the United States. For more than 150 years, Siemens has built a culture of long-term commitment to customers through new ideas and technologies. Today, Siemens provides Biogas Digester Generation solutions, where our foremost objective is to develop environmentally friendly, world-class process control and power management systems. We manufacture fuel cells, power generation systems, gas holder systems, and SCADA technology. USFilter, a Siemens Company delivers cost-effective, reliable water and wastewater treatment systems and services using the most advanced anaerobic treatment technology.

### Stewart Engineered Equipment Co., Inc.

Dave Stewart

16111 Warmington Lane

Huntington Beach

CA 92649

**Tel:** (714) 840-0075

**Fax:** (714) 840-9019

**Email:** dste170442@aol.com

**Website:** N/A

**Year Established:** 2000

**# of Farm Projects:** 2

**# of Biogas Projects:** 20

Engineer, design, manufacture, and service biogas gas compression and conditioning systems. System designs for engines, microturbines, gas turbines, fuel cells, and other processes. Equipment includes: blowers or compressors, liquid separators, chillers, heat exchangers, coalescing filters. All the equipment is mounted on a skid base with all electrical, controls and piping. Complete systems test are done in the shop before shipment. We are the nations leader in providing gas compression and conditioning systems for microturbines and fuel cells on biogas. Gas conditioning includes H<sub>2</sub>S and siloxane removal.

### SUMA America, Inc.

Christie Allen

321 N. Clark Street, Ste. 1425

Chicago

IL 60654

**Tel:** (312) 377-6125

**Fax:** (312) 644-0738

**Email:** christie@gosuma.com

**Website:** www.gosuma.com

**Year Established:** 1957

**# of Farm Projects:** 1000+

**# of Biogas Projects:** 1000+

Biogas agitators and manure mixers for lagoons, AD systems and waste water. Can be connected to tractors, lagoon membranes or mounted on digester tanks.



## Manufacturers/Distributors of System Components

### Vaughan Company, Inc.

Mike Panther

364 Monte-Elma Road

Montesano WA 98563

**Tel:** (360) 249-4042

**Fax:** (360) 249-6155

**Email:** mpanther@chopperpumps.com

**Website:** www.chopperpumps.com

**Year Established:** 1956

**# of Farm Projects:** 1000

**# of Biogas Projects:** 2000

Vaughan Company, Inc. designs and builds complete mixing systems for methane digesters and sludge-storage tanks. Vaughan Company, Inc. also manufactures a complete line of heavy-duty chopper pumps.

### Vogelsang

Rich Owens

7966 SR-44

Ravenna OH 44266

**Tel:** (330) 389-9120

**Fax:** (971) 223-2975

**Email:** richo@vogelsangusa.com

**Website:** www.vogelsangusa.com

**Year Established:** 1929

**# of Farm Projects:** 1200+

**# of Biogas Projects:** 2000+

Since 1929, Vogelsang has been a world leader, manufacturing a family of high quality, extremely dependable sludge & manure handling and pumping products for the world's industrial, municipal, and agricultural markets.

#### PUMPS

With the release of the HiFlo pulsation free rotors, used exclusively in the Vogelsang positive displacement, rotary lobe pump, Vogelsang once again marked itself as an industry leader. HiFlo's unique design allows for pulsation free operation through the entire range of pumping. Additionally our pumps can pull a suction lift to 25ft (8m), run dry, pump in either direction, and feature a minimum of 25% more sealing lines per series, over other conventional designs. Coupled with Vogelsang's uniquely designed rotary lobe pump, the combination will allow flows from 5 to 4,485 US gpm (1.1 1,020 m<sup>3</sup>/hr), and pressures up to 232psi (16 bar).

#### MACERATORS

Our series of high performance macerators, Rota Cut, effectively reduces solids to specific size requirements, and reduces the costs associated with the operation of downstream equipment. Objects and debris suspended in liquid such as plastic fragments, rubber, hair, rags, applicators, straw, plastic pens, string, wood, bones, etc. are drawn through the cutting screen and shredded by the self sharpening rotary blades into an acceptable size for the downstream equipment to pass. Optional cutter screen configurations provide the ability to condition solids to specific sizes, down to less than 1/4" (6mm). Features include auto reverse, self sharpening blades, and reusable cutter screens. Rota Cut is 100% rebuildable inline, which eliminates the need to send out a cutter cartridge for reconditioning.

#### DIGESTER BIOMASS MIXING

The QuickMix is a combination of a dual auger and a rotary lobe pump. The dry solids are fed into the hopper at the top and the augers begin to break them down while advancing the material into the mixing area. The fitting at the base of the hopper flows liquid sludge/manure into the bottom of the hopper where it begins to mix with the dry solids as they advance toward the pump end of the unit. By the time the liquid gets to the pump, it has been thoroughly mixed with the dry solids creating slurry that is of an ideal mixture for delivery to the digester. QuickMix keeps the digester from being slug feed, and give an optimal mixture to increase overall gas production.



## Manufacturers/Distributors of System Components

### Xebec Adsorption, Inc.

Valerie Sorschak

**Tel:** (450) 979-8728

**Year Established:** 1967

**Fax:** (450) 979-7869

**# of Farm Projects:** 7

**Email:** vsorschak@xebecinc.com

**# of Biogas Projects:** 13

**Website:** www.xebecinc.com

Xebec Adsorption Inc. is a global provider of biogas upgrading equipment. Xebec's mission is to ensure our customers receive the maximum revenue from their biogas stream whether it is from an anaerobic digester, landfill or waste water plant. Xebec offers skid or containerized upgrading systems, and with our partners, engineering, procurement and construction management (EPCM). Xebec's technology is based on a proven, rapid cycle PSA system which delivers high recovery and gas purity to pipeline specification. Benefits of Xebec's second generation Xebec's upgrading technology include a one step process to remove CO<sub>2</sub>, N<sub>2</sub>, O<sub>2</sub>, and H<sub>2</sub>O. Xebec's upgrading systems ensure low installation and operating costs while at the same time optimizing system uptime and availability.

## Manufacturers/Distributors of Tanks

### Agrimass Enviro-Energy Inc.

Dan Costa

**Tel:** (559) 687-3306

**Year Established:** 2002

2500 E. Tulare Ave.

**Fax:** (559) 687-3305

**# of Farm Projects:** 12

Tulare CA 93274

**Email:** dancosta@agrimassenviroenergy.com

**# of Biogas Projects:** 3

**Website:** N/A

Provide integrated energy and environmental systems to dairy farms.

### Engineered Storage Products Company

Dick Nelles

**Tel:** (815) 756-1551

**Year Established:** 1945

345 Harvestore Drive

**Fax:** (815) 756-1659

**# of Farm Projects:** 17

DeKalb IL 60115

**Email:** dnelles@engstorage.com

**# of Biogas Projects:** 53

**Website:** www.slurrystore.com

Engineered Storage Products Company manufactures glass fused to steel tanks and pressurized roofs used in methane digester applications. Tanks are installed and serviced by authorized dealers.

### Industrial Solutions, USA

Kirk E. Jeffries

**Tel:** (605) 274-9295

**Year Established:** 2004

5115 S. Rolling Green Ave., Ste #211

**Fax:** (605) 275-0072

**# of Farm Projects:** N/A

Sioux Falls SD 57108

**Email:** kjeffries@industrialsolutionsusa.com

**# of Biogas Projects:** N/A

**Website:** www.industrialsolutionsusa.com

Industrial Solutions USA provides thick 100% solids sprayed on monolithic corrosion resistant, abrasion/impact resistant, chemical resistant, anti-static, antimicrobial linings. Our linings can be sprayed over geotextile, concrete, steel, wood or any other substrate to form an impervious primary and/or secondary lining containment system. The lining is tack free in one minute and can be pigmented any color. Our linings are EPA-SPCC compliant Title 40, Part 112.



## Publishers

### BioCycle Magazine

Jerry Goldstein  
419 State Avenue  
Emmaus PA 18049

**Tel:** (610) 967-4135  
**Fax:** (610) 967-1345  
**Email:** biocycle@jgpress.com  
**Website:** www.biocycle.net

**Year Established:** 1975  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** N/A

Published since 1960, BioCycle, Journal for advancing composting, organics recycling and renewable energy is recognized as the foremost magazine on turning municipal, industrial and agricultural wastes into valuable end products including renewable energy, soil conditioners, and compost. Editorial reports on anaerobic digestion, methane recovery, large-scale composting, community digesters, regulations, research, and process control.

## Universities

### Cornell University, Workplace Health & Safety Program

Nellie J. Brown, MS, CIH  
300 Day Hall  
Ithaca NY 14853

**Tel:** (716) 852-1444  
**Fax:** (716) 852-3802  
**Email:** njb7@cornell.edu  
**Website:** www.manuremanagement.cornell.edu

**Year Established:** N/A  
**# of Farm Projects:** N/A  
**# of Biogas Projects:** 4

The Workplace Health and Safety Program provides technically-based training and technical assistance services to assist management, labor, and medical and legal professionals in putting scientific and technical information to practical use in resolving work environment problems. We provide public and on-site courses and workshops for management, labor unions, and the public, serving approximately 2500 students per year with instruction. An even greater number of people are potentially reached through technical assistance. Examples of technical assistance services available are: on-site hazard evaluation including job hazard analysis, process failure analysis, overall workplace vulnerability assessments, and indoor air investigations; guidance for medical surveillance and periodic screenings; assistance in selection of engineering controls, administrative controls, protective clothing or equipment; and assistance in product or process substitution to reduce workplace hazards. The Program publishes health hazard manuals, fact sheets, and technical articles. Both training and technical assistance services are available on the safety and hazard assessment of farm digesters, including the manure handling system, anaerobic digester, and biogas handling system. Two hazard assessment documents developed for digester systems are available at the Cornell University Manure Management Program website: <http://www.manuremanagement.cornell.edu/HTMLs/Safety.htm>

### University of Florida, Soil and Water Science Department

Dr. Ann C. Wilkie  
P.O. Box 110960 University of Florida - IFAS  
Gainesville FL 32611-0960

**Tel:** (352) 392-8699  
**Fax:** (352) 392-7008  
**Email:** acwilkie@ufl.edu  
**Website:** www.biogas.ifas.ufl.edu

**Year Established:** N/A  
**# of Farm Projects:** 1  
**# of Biogas Projects:** 1

Dr. Ann C. Wilkie is a Professor in the Soil and Water Science Department at the University of Florida-Institute of Food and Agricultural Sciences. Her specialty is environmental biotechnology, with particular emphasis on anaerobic microbiology and biomass to biofuel conversion. She has conducted extensive research on the practical application of anaerobic digestion for waste treatment and renewable energy production from biomass and organic residues. Dr. Wilkie is an internationally recognized expert in biogas technology and the inventor of US Patent No. 6,811,701, Fixed-Film Anaerobic Digestion of Flushed Manure. Her fixed-film anaerobic digester system design has been operating continuously at the University of Florida's Dairy Research Unit since 2000 to treat flushed dairy manure, control odors, and produce biogas for on-farm use. Dr. Wilkie's major research interests include: livestock waste management technology for odor control, bioenergy production, nutrient recovery and water quality improvement; biogas generation from bioethanol and biodiesel by-products; biomass conversion/utilization for renewable energy generation; the investigation of microbial and environmental factors influencing biodegradation; and the development of practical approaches to bioremediation and agricultural/industrial waste treatment. She is a frequent guest speaker at national and international conferences dealing with biofuels, climate change and sustainability issues.