ENVIRONMENTAL POWER CORP Form 10-K March 30, 2010 Table of Contents

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

#### **FORM 10-K**

(Mark One)

X ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2009

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from

to

Commission file number: 001-32393

### **Environmental Power Corporation**

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of

75-3117389 (IRS Employer Identification Number)

incorporation or organization)

120 White Plains Road, 6th Floor, Tarrytown NY 10591

Registrant s telephone number, including area code: (914) 631-1435

Securities registered pursuant to Section 12(b) of the Act:

## Title of Each Class Name of Exchange on Which Registered Common Stock, \$0.01 par value per share The NASDAQ Stock Market LLC Securities registered pursuant to Section 12(g) of the Act: None

(Title of Class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes "No x

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes "No x

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No "

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes "No"

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See definitions large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act (Check one).

Large accelerated filer "

Non-accelerated filer x

Smaller reporting company x

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes "

No x

The aggregate market value of the registrant s common stock held by non-affiliates of the registrant as of June 30, 2009, was approximately \$7.3 million based on \$0.52, the price at which the registrant s common stock was last sold on June 30, 2009, the last business day of the registrant s most recently completed second fiscal quarter.

As of February 28, 2010, the registrant had 15,708,591 shares of common stock outstanding.

#### DOCUMENTS INCORPORATED BY REFERENCE

Specified portions of the registrant s definitive proxy statement on Schedule 14A for the registrant s 2010 annual meeting of stockholders, to the extent filed pursuant to Regulation 14A within 120 days after the end of the registrant s fiscal year ended December 31, 2009, are incorporated by reference into Part III of this report. In the event that such proxy statement is not filed within 120 days after the end of the registrant s fiscal year ended December 31, 2009, the registrant will file an amendment to this report within such 120-day period setting forth the information required by Part III of this report.

#### ENVIRONMENTAL POWER CORPORATION

#### ANNUAL REPORT

#### ON FORM 10-K

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#### **Cautionary Statement Regarding Forward-Looking Statements**

The Private Securities Litigation Reform Act of 1995, referred to as the PSLRA, provides a safe harbor for forward-looking statements. Certain statements contained or incorporated by reference in this Quarterly Report, such as statements concerning planned manure-to-energy systems, our sales pipeline, our backlog, our projected sales and financial performance, statements containing the words may, assumes, forecasts, positions, predicts, strategy, will, expects, estimates, anticipates, believes, projects, intends, plans, budgets, potential, variations thereof, and other statements contained in this Quarterly Report regarding matters that are not historical facts are forward-looking statements as such term is defined in the PSLRA. Because such statements involve risks and uncertainties, actual results may differ materially from those expressed or implied by such forward-looking statements. Factors that could cause actual results to differ materially include, but are not limited to:

uncertainties regarding the ability to obtain additional financing, and the timing, amount and terms of such financing,
uncertainties regarding our payment defaults under various material obligations we and our subsidiaries have entered into and the
remedies our creditors may exercise with respect thereto,
uncertainties relating to early-stage companies;
the lack of binding commitments and the need to negotiate and execute definitive agreements for the construction and financing of
facilities,
the lack of binding commitments for the purchase of gas produced by certain facilities,
the lack of binding commitments for, and other uncertainties with respect to, supplies of substrate,
uncertainties regarding the costs associated with substrate and other project inputs,

attributes, and the level of revenues we may achieve from such sources,

uncertainties regarding the amount and rate of growth in operating expenses,

unpredictable developments, including plant outages and repair requirements as well as risks related to weather and the unpredictability of extreme weather events,

risks related to performance on the part of suppliers of components, goods and services to our facilities,

financing and cash flow requirements and uncertainties,

inexperience with the design, construction, startup and operation of multi-digester facilities,

difficulties involved in developing and executing a business plan,

technological uncertainties, including those relating to competing products and technologies,

commodity price volatility, particularly with respect to the price of natural gas,

the difficulty of estimating construction, development, repair, maintenance and operating costs and timeframes,

the uncertainties involved in estimating insurance and warranty recoveries, if any,

the inability to predict the course or outcome of any negotiations with parties involved with our projects,

uncertainties relating to general economic and industry conditions,

uncertainties relating to government and regulatory policies, the legal environment, intellectual property issues and the competitive environment in which Environmental Power Corporation and its subsidiaries operate,

and other factors, including those described in Part I, Item 1A of this Annual Report on Form 10-K under the heading Risk Factors, as well as factors set forth in other filings we make with the Securities and Exchange Commission. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date that they are made. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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#### PART I

## Item 1. Business Overview

Environmental Power is a developer, owner and operator of renewable energy production facilities. Environmental Power s goal is to produce energy that is Beyond Renewable , which Environmental Power defines as energy that not only is derived from waste materials instead of precious resources, but energy that is also clean and reliable. Environmental Power and its subsidiaries develop and own facilities that, unlike many renewable energy facilities, are intended to be profitable without the need for federal tax subsidies. Any such government assistance would, however, benefit Environmental Power s facilities by increasing their potential for profitability, while at the same time expanding opportunities for the profitable deployment of such facilities. Environmental Power believes that a number of factors, including volatile energy prices, greater desire for renewable energy sources, more stringent environmental and waste management requirements imposed on farmers and food industry waste producers, and revenue opportunities from carbon sequestration credits will continue to provide favorable market conditions for its business.

In the past, we have operated in two major segments, through Microgy, Inc., as a developer of renewable energy facilities for the production and commercial application of methane-rich biogas from agricultural and food industry and other organic wastes, and through EPC Corporation and its subsidiary, Buzzard Power Corporation, referred to as Buzzard, the holder of a leasehold interest in a waste-coal fired generating facility in Pennsylvania known as the Scrubgrass facility. On May 31, 2007, our board of directors authorized management to enter into negotiations regarding the disposition of the leasehold interest in the Scrubgrass facility. On February 29, 2008, we completed the disposition of the leasehold interest. As a result, for financial reporting purposes, we are now consolidating all segments of continuing operations and reporting the results of Buzzard as discontinued operations. We thus now operate only in Microgy s segment.

Microgy is a developer of renewable energy facilities for the production and commercial application of methane-rich biogas produced from animal, food industry and other organic wastes. The biogas can be sold to end-users or used to produce pipeline-grade methane, which Microgy refers to as renewable natural gas, or RNG<sup>®</sup>, liquefied natural gas, or LNG, compressed natural gas, or CNG, renewable electrical energy or thermal energy, as well as other useful by-products. Microgy systems utilize a proven European biogas production technology. In addition, Microgy has developed significant engineering, construction and process knowledge regarding these systems.

Due to the increased demand for renewable energy, Microgy believes that its systems can be profitable without the need for federal subsidies, rebates, or grants. Nevertheless, Microgy believes that tax credits and other such incentives may be available in the future to Microgy s facilities, and such incentives would serve to enhance the potential profitability of its facilities. Future climate change legislation, if any, may enhance the value of Microgy s products. In addition, the energy output from Microgy s systems may carry a premium price in some areas, as numerous environmentally responsible entities are seeking renewable energy sources and many states have either passed or are considering legislation requiring utilities to obtain or generate a certain percentage of their power from renewable sources.

In addition to the value generated from the production and sale of renewable gas, our facilities produce soil amendment products that can be used as a bedding, compost or peat moss and liquid fertilizer that can be used for crop growth. We believe that our facilities can generate additional environmental benefits with significant economic and social value by providing a valuable waste management solution for farms and other producers of organic wastes, such as those in the food industry. Federal and state agencies have either passed or are considering regulations that require concentrated animal feeding operations, referred to as CAFOs, to implement changes to their current waste management practices. We believe that these increasingly stringent environmental regulations will be another factor creating opportunities for the deployment of our systems.

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Microgy intends to continue to focus on its strategy of developing large-scale, standardized facilities utilizing an ownership model either entirely or together with financial or operating partners. Under this model Microgy will construct, own and operate facilities and profit from the ongoing sale of biogas or RNG® as well as sales of greenhouse gas sequestration credits or other marketable environmental benefits. This strategy encompasses the construction and operation of stand-alone merchant plants like the Huckabay Ridge facility described below, as well as facilities dedicated to the needs of a single customer at one or more customer locations, such as the Grand Island facility described below. By pursuing this strategy, Microgy intends to accumulate gas production and carbon sequestration capacity over time. In addition, Microgy continues to standardize both its system design and its approach to the marketplace in order to allow for a cost-effective scale-up of its business.

Having constructed both the multi- and single-tank system in four currently operating installations, Microgy intends to own the digester systems it develops, either outright, through an affiliated company, or in substantial part, through HMI Energy, LLC, a joint-venture company formed in January 2010 (discussed further below), in which Microgy owns 30% of the membership interests. Our multi-digester facilities will primarily produce pipeline-quality renewable natural gas, although we will also consider opportunities to produce and sell conditioned biogas, electricity, compressed natural gas, referred to as CNG, or liquid natural gas, referred to as LNG, from our facilities. Microgy s development efforts are focused on applications of its technology that are resource efficient. Development of smaller scale and single-digester facilities will be targeted toward customers that have multiple sites and opportunities that have shorter development cycles.

Microgy s efforts have resulted, most recently, in the start of commercial operations at the Huckabay Ridge facility in Stephenville, Texas, which began commercial operations in the first quarter of 2008. Huckabay Ridge consists of eight 916,000-gallon digesters which operate together to process the manure from approximately 10,000 cows and produce 575,000 million British Thermal Units, or MMBtus, of RNG® annually. The gas is treated and compressed to produce pipeline grade methane that is sold and delivered directly into nearby natural gas pipelines. Huckabay Ridge is expected to produce approximately 782,000 MMBtus, of pipeline-grade methane for sale per year once a planned combined heat and power, or CHP, system has been installed and potential modifications made to the gas processing systems.

We have two other multi-digester facilities in development in Texas having expected output of 670,000 MMBtus. We have also announced three proposed multi-digester RNG® facilities in California, and a proposed multi-digester RNG® facility in Colorado. These projects are in various stages of development. In January 2010, Microgy contributed its interest in one of the California projects and the Colorado project to the new joint venture, HMI Energy, LLC, described below.

In addition, Microgy has commenced construction of a multi-digester renewable biogas facility to be located at the flagship Grand Island, Nebraska beef processing plant of JBS Swift & Company, referred to as Swift. Under the terms of the agreement with Swift, Microgy will construct, own and operate the facility and sell its gas output to Swift for use in its operations to offset natural gas utilization pursuant to a 15-year gas purchase agreement. The Grand Island facility will consist of two 1.3 million gallon digesters that will process wastes generated by the Grand Island processing facility and that we expect will be able to produce approximately 235,000 MMBtus per year. We completed \$7.0 million in tax-exempt bond financing in Nebraska in July 2008 to finance a portion of the construction costs of the Grand Island facility. However these bonds are currently in default and the trustee or 25% of the bondholders could accelerate the bonds and demand repayment at any time. We are currently seeking a solution to these circumstances, including the financing to complete construction of the facility, but we cannot assure you that we will be successful in doing so on favorable terms, or at all.

In addition, Microgy is operating three single digester facilities in Wisconsin. Microgy sold these projects to the farms on which they are located, and developed them in conjunction with Dairyland Power Cooperative, an electric cooperative utility, referred to as Dairyland. The biogas from these projects is used by Dairyland to

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generate electricity. In January 2010, Microgy contributed the rights to the net revenues of the Wisconsin facilities to HMI Energy, LLC, a joint venture between Microgy, Inc. and Homeland Renewable Energy, Inc. Microgy retains a 30% membership interest in the joint venture.

#### The Microgy Market Opportunity

We believe that facilities based on Microgy s technology can generate profitable quantities of marketable, renewable gas from animal and food industry wastes and by-products and other organic waste streams. Increased interest in renewable energy sources, as well as a desire for energy not subject to commodity price fluctuations, drives demand for each of these uses of gas produced by Microgy s systems. Also, we believe that increasingly stringent environmental regulations concerning handling of animal and other wastes motivate demand for Microgy s systems at or near CAFO and food industry sites. The ultimate opportunity to develop facilities, as well as to manage and/or operate them profitably, depends on numerous factors, including the value that can be derived from the various markets described below.

Gas. While natural gas prices have been and continue to be volatile, we anticipate increases in natural gas prices in the long-term due to considerable increases in demand for gas both domestically and overseas. In the United States, this increase will be due principally to the fuel needs of the power plants that have been built in the past decade, as well as relatively limited increases in natural gas delivery capabilities. In addition, developing countries, including China and India, are becoming large consumers of energy, placing further pressure on prices for fossil fuels. Microgy s systems produce commercial quantities of biogas with a high percentage of methane, which is then refined to RN® by processing it with scrubbing devices to remove carbon dioxide, sulfur compounds and other impurities. Microgy s systems for the production of RNG®, unlike natural gas wells, do not suffer depletion and are consistent sources of output so long as required inputs are available.

Renewable Energy. We believe that market and political forces will continue to drive increased adoption of renewable energy sources, principally due to increasing concerns about the price, volatility, supply stability and environmental impact of conventional fuels. The demand for energy produced from renewable resources may provide our facilities with a variety of benefits, including federal and state renewable power production and investment credits, tax credits and greenhouse gas sequestration credits, as well as a competitive advantage as compared to conventional sources of supply. For example, currently 33 states, including Texas and California and the District of Columbia, have enacted a renewable portfolio standard or other state mandates requiring electric utilities to increase their use of renewable energy resources such as wind, solar, and bioenergy. We believe that the directives embodied in the Energy Policy Act of 2005, the 2008 Farm Bill, and the American Recovery and Reinvestment Act of 2009 and the accompanying tax credits and related benefits should serve to further drive adoption of renewable energy solutions like those provided by Microgy.

We also believe that the greenhouse gas sequestration credits that Microgy s facilities are expected to produce will be marketable. Importantly, digester projects that reduce methane emissions compared to baseline conditions produce offsets that qualify under many mandatory and voluntary programs in place. However, the specific methodologies for calculation and monitoring vary widely.

While in many cases we are required to share the benefits of such credits with our business partners and investors, we nevertheless expect such offsets to enhance the economics of our facilities. We believe that our share of the market for greenhouse gas sequestration credits will add value and enhance the financial viability of our facilities.

Climate change legislation currently under consideration, as well as international treaties relating to climate change, may further drive demand for Microgy s products, including greenhouse gas offsets, or provide further production incentives.

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#### Microgy s Strategy

Our objective is to become a leader in the renewable energy sector through the production and marketing of pipeline grade gas and biogas and in the development of pipeline gas production capacity and biogas resources, which will constitute gas reserves under our control. Key elements of our strategy include:

Developing facilities in which we will have an ownership interest, thereby developing and growing non-depleting biogas reserves under our management. We intend to continue to focus on an ownership model, in which we own facilities entirely or together with financial or operational partners. We believe that this ownership model will allow us to profit from the sale of biogas or pipeline-grade gas for the operational life of the facilities. By owning and operating such facilities, and by securing the supply of required amounts of manure and substrates, we seek to develop and grow a portfolio of gas reserves under our control. We view our facilities as gas wells but without the typical depletion curve, so long as required inputs are available.

Capitalizing on the environmental attributes, as well as the renewable nature of the energy, generated by our facilities. We believe that the environmental attributes, such as greenhouse gas sequestration credits, generated by our facilities represent a potential source of revenue, and we intend to pursue commercialization of these attributes, through sales into trading markets as well as bi-lateral and revenue sharing arrangements. In addition, we believe that the renewable nature of the gas produced by our facilities will be attractive to certain purchasers, including entities required to achieve renewable portfolio standards, and may result in premium prices in some cases. We intend to aggressively market the renewable quality of our gas to these purchasers.

Focusing development efforts on markets allowing for rapid and cost-effective scale-up of our business. Microgy has now constructed both the multi- and single-tank system in four currently operating installations. Our multi-digester facilities will primarily produce pipeline quality renewable natural gas, although we will also consider opportunities to produce and sell conditioned biogas, electricity, CNG and LNG from our facilities. Microgy s development efforts are focused on applications of its technology that are resource efficient. Development of smaller scale and single-digester facilities will be targeted toward customers that have multiple sites and opportunities that have shorter development cycles.

Standardizing systems to allow for rapid and cost-effective replication and scalability. We intend to standardize and streamline elements of our systems so that we can drive down their costs and implement them more rapidly. Toward this end, Microgy is refining the design of its multi-tank system based on knowledge gained from its Huckabay Ridge facility, and is pursuing standardization of components, procurement channels, vendors, and design-build contracts to allow for rapid and cost-effective construction.

Pursuing the advantages of our business model, in which we create and manage profitable renewable energy opportunities while alleviating the environmental pressures facing agriculture and food industry participants. We believe we are the leading provider of large scale RNG based anaerobic digesters that is aggressively pursuing a business model of creating and managing profitable renewable energy opportunities while simultaneously addressing customers—environmental issues. Furthermore, by operating and maintaining the facilities ourselves, we believe that we will be able to maximize gas production and control the supply of required materials. To our knowledge, many other suppliers of anaerobic digestion systems merely supply the equipment, and leave the ongoing operation of the system to the purchaser. By pursuing our business model, we believe we can provide a compelling value proposition to our customers.

#### Microgy s Products and Services

With respect to current and future projects such as our multi-digester RNG® facilities in Texas and California, as well as our smaller-scale, multi-digester dedicated facilities, such as the facility being built for Swift, Microgy seeks to own and operate all or part of each facility, thereby profiting from the sale of the gas produced, whether by the sale of gas as a commodity or to end-users or other purchasers pursuant to longer-term

supply agreements. Therefore, we expect our principal commercial product to be the RNG® or biogas produced by our facilities, together with tradable environmental attributes, such as greenhouse gas offset credits. In addition, other by-products of the operation of these facilities may have commercial value as soil amendments, fertilizer and animal bedding.

An analysis of our sales by product for each of the three years in the period ended December 31, 2009 is as follows:

	2009	2008	2007
Gas sales	\$ 3,836,800	\$ 2,173,453	\$ 540,047
Operation and maintenance services	348,222	325,339	371,344
Tipping fees	425,605	152,873	188,597
Carbon credit sales	18,409	246,891	67,489
Grant revenue	82,411		
Other		6,482	7,470
Total revenue	\$ 4,711,447	\$ 2,905,038	\$ 1,174,947

#### Microgy s Technology

At the heart of the Microgy system is an enhanced biogas production system. Whereas previous systems had principally focused on the environmental remediation aspects of digestion and produced biogas as a by-product, the Microgy system is designed specifically to maximize biogas production. Methane is the main product of the process, making up approximately 60% of the resulting biogas. Microgy system can be easily coupled to standard, generally commercially available gas conditioning equipment in order to clean the biogas to produce RNG®, or the biogas can be burned for use in electric generation or other thermal energy applications. Other by-products of the process can include fertilizers, bedding, compost and other bio-solid products that have economic value and may be marketable.

Microgy s proprietary process mixes animal manure with additional substrates, such as food industry wastes and by-products containing fats, proteins and carbohydrates, in a process referred to as co-digestion. The manure provides the anaerobic bacteria that are the engine of the biogas production process, while also serving as a buffer that assists in maintaining the reaction at proper levels. A wide variety of materials can provide the proteins, fats and carbohydrates that enhance the biological process in our digesters. Substrates that we might use in our digesters include waste crop oils, spoiled food, animal fats, used greases and cooking oils, brewery waste and cheese waste. These materials are widely available but tend to be concentrated in urban areas. The addition of substrate significantly increases gas production, with the relative contributions of substrate and manure to the production of biogas varying depending upon the type of substrate used. The ability to add substrate with known characteristics to our process helps us to balance the health of the digester while increasing biogas output. The controlled combination of these wastes with the manure, along with our operational controls and technical know-how, represent the essential elements of our proprietary approach to the market.

Some substrate materials are useful inputs into other energy production processes or may even be substitutes for animal feed. As such, the value of those materials may change over time depending on market dynamics, emerging technologies or even tax policy. We have focused our efforts on procuring substrates that do not have alternate uses for which companies typically pay a fee for disposal. In some cases, we are paid tipping fees associated with the disposal of these materials, which helps us to mitigate the costs of transporting substrate to our site. Substrate availability, market conditions and transportation requirements can vary significantly by region. As such, project location is an important consideration in determining project feasibility. We have in place a substrate management team that works with our strategic partners to identify and evaluate potential materials and manage logistics.

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Microgy s system utilizes sophisticated equipment and control systems. This allows us to manage the recipe for digestion in each tank, maintain temperature control and adjust the mixing rate. In addition, the Microgy system is composed of steel tanks and piping, which are durable and nonporous, allowing for calibration of the process within a controlled environment and appropriate management of ongoing gas production and equipment operations. Furthermore, the high level of gas output and its high methane content allows for application of other technologies, such as those used for gas conditioning. Coupled with the technical advantages of the system is a suite of proprietary processes and know how to achieve the anticipated levels of biogas production.

#### License Agreement with Danish Biogas Technology A/S

Microgy licenses the anaerobic digestion portion of its technology from Danish Biogas Technology A/S, referred to as DBT. DBT s parent, Xergi A/S, referred to as Xergi, is 50% owned by Schouw & Co., a Danish public company and 50% by DDH, a Danish environmental and engineering firm. DBT has been a leader in the development of this technology and has constructed 30 anaerobic digester facilities in Europe over the past 15 years. In Denmark, DBT s systems have been successful in providing manure management and viable renewable energy for many years.

In May 2000, Microgy entered into a licensing agreement with DBT that granted Microgy a perpetual and exclusive license in North America for the commercial development and use of certain proprietary technologies, including Microgy s core anaerobic digestion technology. This license agreement was amended in April 2003 and March 2005 to further define certain support obligations of DBT and to amend the structure of the compensation payable to DBT for use of the license.

In April 2009, Environmental Power and Microgy entered into a Cooperation Agreement with DBT and Xergi, referred to as the Cooperation Agreement. The Cooperation Agreement supersedes the license agreement described above. The Cooperation Agreement, while maintaining many of the original business concepts

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contained in the original license agreement, restructures the license agreement to reflect Microgy s shift to a build, own and operate business model from the original digester equipment sales model and better defines the respective roles of the parties to enable them to more efficiently interface going forward.

The Cooperation Agreement addresses anaerobic-digester plants incorporating above-ground digesters with mixers, referred to as the DBT Technology. Pursuant to the Cooperation Agreement, DBT grants to Microgy an irrevocable and perpetual right and license to utilize the DBT Technology in the design, construction, and/or operation by Environmental Power, Microgy and their affiliates of anaerobic-digesters and related systems. This grant is exclusive as to North America for the term set forth in the Cooperation Agreement and is non-exclusive as to North America thereafter, excludes Europe during the term but is non-exclusive as to Europe thereafter. As in the original license agreements, the grant is non-exclusive as to the rest of the world, leaving each party free to pursue projects outside of North America and Europe. The Cooperation Agreement further provides that commencing as of May 2009, Microgy may utilize digester technologies other than the DBT Technology throughout the world.

As part of the Cooperation Agreement, the Company agreed to pay a \$500,000 license fee for the Swift Grand Island project. The Company has only paid \$200,000 to date and the remaining \$300,000 is overdue for payment. While DBT has given us notice of material breach under the Cooperation Agreement as a result of the failure to make this payment, it has not taken any action with respect to such failure.

The Agreement became effective in May 2009 when DBT received an up-front payment of certain license fees for certain Microgy projects of Microgy s choosing, which were paid for by Environmental Power s issuance of its 14% Convertible Notes due January 1, 2014, referred to as the 14% convertible notes, in the original principal amount of \$3,000,000. The January 1, 2010 interest payment due on the 14% convertible notes issued to DBT, along with interest due on the other \$5,000,000 principal amount of 14% convertible notes previously issued, was not paid by EPC. The trustee has given the Company notice of default but to date neither the trustee nor any of the note holders have made any attempt to accelerate payment of these notes.

#### Facility and Business Development Efforts

Identified Facilities Development

The following table sets forth facilities that we have identified to date as being under development by Microgy and its affiliates, including information with respect to the type of facility, its location, and its anticipated output:

Facility	Location	Type Gas	RNG Production(a)
Rio Leche	TX	$RNG^{@}$	670,000
Cnossen	TX	$RNG^{@}$	670,000
Hanford Cluster	CA	RNG®	618,000
Bar 20(b)	CA	$\mathrm{RNG}^{@}$	629,000
Maddox	CA	RNG®	340,000
Weld County(b)	CO	$RNG^{@}$	651,000
Swift-Grand Island	NE	Inside-the-Fence	235,000

Total 3,813,000

- (a) Expected gas production in MMBtu / year at full operation
- (b) Ownership transferred in January 2010 to HMI Energy, LLC, in which Microgy has a 30% interest. The foregoing table does not include the Huckabay Ridge facility, which commenced operations in 2008.

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#### The HMI Energy Joint Venture

We have been examining various strategic alternatives over the last several months in support of the build-out of Microgy s project pipeline. In connection with these efforts, in January 2010, Microgy formed a joint development company with Homeland Renewable Energy, Inc., referred to as HRE, whereby Microgy contributed certain assets, as more fully described below, as its equity contribution for a 30% ownership position, and HRE will contribute \$1,500,000 in cash as its equity contribution for its 70% ownership position.

We entered into the following agreements relating to the joint venture with HRE, referred to as the JV Agreements:

a Contribution Agreement, dated January 29, 2010, referred to as the Microgy Contribution Agreement, among Microgy, HMI Energy, LLC, referred to as HMI, and Environmental Power;

a Contribution Agreement, dated January 29, 2010, referred to as the HRE Contribution Agreement, between HRE and HMI; and

a Limited Liability Company Agreement of HMI, dated January 29, 2010, referred to as the LLC Agreement, between Microgy and HRE.

Pursuant to the Microgy Contribution Agreement, Microgy contributed to HMI

certain assets relating to its proposed Bar 20 project in California and its proposed Weld County project in Colorado,

right of first refusal on up to five additional future projects,

Microgy s right to receive net revenues from its Wisconsin projects and the rights and obligations relating to such projects, and

Microgy s right to net receipts from sales of carbon credits available to Microgy, other than those owned or otherwise available to our other subsidiaries, Microgy Holdings and Microgy Grand Island.

In exchange for the foregoing assets, Microgy received 30% of the outstanding membership interests in HMI and has received payments from HMI totaling \$1,100,000. The remaining \$400,000 is due and expected shortly.

In connection with the transactions contemplated by the Microgy Contribution Agreement and the HRE Contribution Agreement, Microgy and HRE entered into the LLC Agreement, which sets forth:

customary terms for the governance of HMI, consistent with HRE s majority ownership but providing for certain minority protections for Microgy;

provisions relating to capital calls for financing the joint venture s projects, including provision for an effective 12% carried interest for Microgy in any project for which it does not meet the capital call and an effective 21% carried interest for HRE in any project for which it does not meet the capital call;

provisions relating to the negotiation of a Management Services Agreement, pursuant to which Microgy would provide customary management services to HMI, and an Operations and Maintenance Agreement, pursuant to which Microgy would provide customary operations and maintenance services to projects developed by HMI, each to be on commercially reasonably terms, including reimbursement of costs and market-based fees;

rights of first refusal on the part of HMI with respect to the development and ownership of Microgy s next five projects and Microgy s obligation to use its development efforts exclusively for the benefit of HMI, which rights of refusal and exclusivity obligations terminate upon the earlier to occur of Microgy obtaining all necessary site and manure supply agreements, construction permits and approvals and commercially reasonable offtake agreements for all five such projects or the expiration or termination of the management services agreement and operations and maintenance agreement; and

the limited right to buy out HRE s ownership in HMI for 120% of the purchase price paid for the membership interests in HMI in certain circumstances.

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HRE specializes in large scale animal waste remediation in the United States, through the development, construction and operation of renewable energy power plants fueled by poultry litter and other agricultural residues. In addition, HRE markets the ash residue from poultry litter combustion as a nutrient rich fertilizer and develops woody biomass fueled power plants through a joint venture with Laidlaw Energy (OTC: LLEG.PK). Microgy believes that entering into the JV Agreements with HRE will provide it with a business partner that can assist Microgy in accelerating the development of the projects contributed by Microgy to the joint venture.

#### **Customers and Suppliers**

#### Customers

Microgy intends to sell the gas generated by its facilities pursuant to mid- to long-term purchase and sale commitments with fixed or predictable prices, at a premium to the natural gas market. When beneficial, Microgy may elect to sell some of the gas in the spot market, as a commodity with price hedging mechanisms.

Microgy s smaller-scale multi-digester facilities will be developed to supply the gas needs of a single customer on-site, such as Swift, pursuant to a long-term purchase and sale agreement, though Microgy expects to have the right to market excess gas not used by these customers.

In the twelve months ending December 31, 2009, we recognized \$3,763,000 in total revenues from sales of RNG®, tipping fees and a grant at our Huckabay Ridge facility and revenues of \$948,000 from gas sales, operations and maintenance services and greenhouse gas sequestration credit sales related to the Wisconsin facilities.

Microgy had two significant customers in 2009, Dairyland and Pacific Gas & Electric Company. In 2009, Pacific Gas and Electric accounted for 70% of revenues and Dairyland accounted for 19% of revenues. We believe our relationship with these customers is good.

In March 2009, we signed a 10 year renewable natural gas supply agreement with Xcel Energy. The agreement, which has an additional 10 year option, provides that the Microgy RNG® will be sold to Xcel on a fixed price basis at a premium to the current market price for traditional natural gas. The production will come from a facility in Colorado on which we intend to commence construction when we have obtained the necessary permits, equity and debt financing.

#### Suppliers

Microgy and its affiliates generally obtain the construction materials and equipment necessary to construct and operate their facilities from commercial sources pursuant to purchase orders and similar arrangements. Microgy believes these materials and equipment to be generally commercially available. Microgy and its affiliates generally enter into manure handling agreements with the farms on which their facilities are located for the supply of manure for the operation of such facilities, or arrangements for the operation by third parties of manure composting operations on land owned by Microgy affiliates. Microgy generally seeks to locate its large-scale multi-digester facilities in areas with a high concentration of manure from diverse sources.

Substrate for a facility can be obtained from a variety of sources, either on an opportunistic basis, pursuant to informal supply relationships, or from the operations of the consumer of the gas, in the case of the smaller-scale, single customer installations. Substrate can also be obtained via long-term contract, such as the agreement in place with Liquid Environmental Solutions Corp.

#### **Discontinued Operations**

Buzzard Power Corporation, referred to as Buzzard, is a subsidiary of our wholly-owned subsidiary, EPC Corporation. Buzzard formerly leased a generating facility from Scrubgrass Generating Company, L.P. The Scrubgrass plant, referred to as Scrubgrass, located on a 600-acre site in Venango County, Pennsylvania, is an approximate 83 megawatt waste coal-fired electric generating station. Buzzard completed the disposition of its leasehold interest in this facility on February 29, 2008.

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#### Competition

Microgy plans to generate revenue from the development and ownership of facilities that market renewable, green energy in addition to providing pollution control features to the agricultural and food industry markets. Microgy s green competitors include other energy producers using biomass combustion, biomass anaerobic digestion, geothermal, solar, wind, new hydro and other renewable sources. These companies represent a significant class of competitors because they will compete with Microgy for sale of marketable renewable energy credits and participation in various renewable portfolios and other programs.

Competition in the traditional energy business from electric utilities and other energy companies is well established, with many substantial entities having multi-billion dollar, multi-national operations. Many of these companies are beginning to compete in the alternative fuels and renewable energy business with the growth of the industry and the advent of many new technologies. Larger companies, due to their greater financial and other resources, will be better positioned than Microgy to develop new technologies and to install existing or more advanced renewable energy facilities, which could harm Microgy is business. Microgy also faces many forms of competition with respect to the resources required to operate its facilities. Such competition includes other providers of pollution control, including environmental engineers, providers of pollution control systems, private companies, public companies, associations, cooperatives, government programs, foreign companies, and educational pilot programs. Furthermore, there are many companies that offer anaerobic digester systems. A number of competitors have more mature businesses and have successfully installed anaerobic digester systems in the United States. Microgy may be forced to compete with any of these competitors for access to equipment, construction supplies, skilled labor for the construction and operation of its facilities and the supplies of manure and substrate required to operate its facilities. In addition, Microgy may also have to compete for access to substances that make desirable substrates with other users of these substances, such as recyclers of waste grease and producers of biodiesel and other biofuels. The effect of such competition could be reflected in higher costs associated with obtaining access to these resources, as well as an insufficient supply of these resources for the profitable operation of Microgy is facilities.

#### **Environmental Regulation**

Our present and any future projects are and will be subject to various federal, state and local regulations pertaining to the protection of the environment, primarily in the areas of water and air pollution and waste management. Microgy intends to build plants in various states. These facilities will be subject to federal, state and local regulatory requirements in all the locations where they may operate.

In many cases, these regulations require a lengthy and complex process of obtaining and maintaining licenses, permits and approvals from federal, state and local agencies. We also have and will have significant administrative responsibilities to monitor our compliance with the regulations. As regulations are enacted or adopted in any of these jurisdictions, we cannot predict the effect of compliance therewith on our business. Our failure to comply with all new applicable requirements could require modifications to operating facilities. During periods of non-compliance, our operating facilities may be forced to shut down until the compliance issues are resolved. We are responsible for ensuring the compliance of our facilities with all the applicable requirements and, accordingly, we attempt to minimize these risks by dealing with reputable contractors and using appropriate technology to measure compliance with the applicable standards. The cost of environmental regulation, including the associated asset retirement obligation, does and will continue to affect our profitability.

Depending on the location of each individual plant, the federal Clean Water Act and state implementation plans of the federal Clean Air Act, as well as other state and local laws, may apply to Microgy s projects. The primary federal law affecting manure management on animal operations is the Clean Water Act, under which the National Pollutant Discharge Elimination System, or NPDES, program covers concentrated CAFOs.

Federal NPDES permits may be issued by the EPA or any state authorized by the EPA to implement the NPDES program. The EPA has certified 45 states to issue their own NPDES permits. Furthermore, in December

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2002, the EPA issued new rules to regulate manure run-off on farms, one of the nation s leading causes of water pollution. The new rules apply to an estimated 15,500 livestock operations across the country. These farms will need to obtain permits, submit an annual report, and develop and follow a plan that will ensure that measures are being instituted to minimize runoff from wastewater and manure. We believe that these requirements represent a significant opportunity for Microgy, insofar as a Microgy system can play a useful role in any animal waste management program.

We expect that all of our facilities will be required to obtain various state and local environmental and other permits and approvals. For example, grease-trap waste from restaurants and other food service providers is a desirable and highly available form of substrate for our facilities in Texas. The Texas Commission of Environmental Quality (TCEQ) environmental authorities classify grease-trap waste as Municipal Solid Waste (MSW) and such waste is managed as a non-hazardous municipal waste. Microgy is required to obtain a solid waste permit for each of our planned facilities in Texas to the extent we desire to use grease-trap waste as substrate in the operation of such facilities, and have obtained such a permit for the Huckabay Ridge facility. In addition, we have obtained water discharge permits for each of our planned California facilities, and obtaining such permits is a lengthy process. To date, our experience in obtaining such permits has been positive but future projects may, however, present unique circumstances, and the timing and cost of permits may be uncertain.

We expect that any climate change legislation, or any international treaties relating to climate change, may have a positive effect on our business to the extent that they increase demand for our projects or enhance the market for the greenhouse gas offsets and credits produced by our facilities.

#### **Energy Regulation**

As evidenced by the facilities developed by Microgy in Wisconsin, Microgy s anaerobic digester facilities can be used for the generation of electricity. In the event that Microgy were to pursue applications of its technology for the generation of electricity for sale by Microgy into the electric grid, any such generating facility would become subject to the complex matrix of federal and state regulation of the energy sector, including the federal Public Utility Regulatory Policies Act, the Federal Power Act and the regulation and oversight of state public utility commissions. Microgy, itself, does not currently produce electricity for sale into the electric grid.

#### **Employees**

As of December 31, 2009, we had thirty-one full and part-time employees, including executive officers and other marketing, finance, engineering and administrative personnel. None of our employees are represented by a collective bargaining agreement, and we consider our relations with our employees to be good. Eleven of the thirty-one employees are operating personnel at our Wisconsin or Texas facilities.

#### **Available Information**

We maintain a website with the address *www.environmentalpower.com*. We are not including the information contained on our website as part of, or incorporating it by reference into this annual report. We make available free of charge on or through our website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to those reports as soon as practicable after such material is electronically filed with or furnished to the Securities and Exchange Commission.

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#### ITEM 1A. RISK FACTORS

Investing in our securities, involves a high degree of risk. You should carefully consider the risks and uncertainties described below before purchasing our securities. The risks and uncertainties described below are not the only ones facing our company. Additional risks and uncertainties may also impair our business operations and adversely affect our prospects. The order in which such risks are presented does not necessarily reflect the relative importance of such risks or the likelihood that any of the events or circumstances described below will occur or exist.

If any of the following risks actually occur, our business, financial condition or results of operations would likely suffer. In that case, the trading price of our common stock could fall and you may lose all or part of the money you paid to buy our common stock.

#### **Risks Relating to Our Business**

We have experienced losses to date, and we anticipate that we will continue to experience losses through at least 2012, which means that we will have to raise significant additional financing during the first half of 2010 in order to continue our business operations. The opinion from our independent auditors as of December 31, 2009, stated that there is substantial doubt at December 31, 2009, about our ability to continue as a going concern.

We are a company that has been pursuing an aggressive and novel business approach to the construction and operation of renewable energy facilities and the production of renewable natural gas. As noted below, our sole operating business, Microgy, is in the early stages of its development. As a result, we have a history of losses. For the twelve months ended December 31, 2009, we incurred a net loss from continuing operations of \$36,112,000 including a non-cash write-down for the impairment of certain assets of \$26,070,000. For the year ended December 31, 2008, we incurred a net loss from continuing operations of \$22,996,000 which includes a non-cash, non-recurring expense for the impairment of goodwill of \$4,913,000. For the year ended December 31, 2007 we incurred a net loss from continuing operations of \$11,161,000. We expect to continue to incur losses, reduce our earnings or, as the case may be, add to our deficit as we seek to further develop our business. We currently expect that these ongoing losses will adversely affect our financial condition through at least 2012. Future losses are likely to continue unless we successfully implement our business plan. As a result of these losses, we anticipate that we will, in all likelihood, have to rely on external financing for most of our capital and operational requirements. We will need to raise substantial financing in order to fund ongoing general and administrative expenses associated with our corporate overhead, debt service and dividend requirements to continue as a going concern. While we have raised \$1,100,000 in cash to date from the contribution of certain assets to a joint venture, these funds will not be sufficient to meet our operating needs during the first half of 2010. We currently have no commitments for any additional financing. We cannot assure you such financing will be available on reasonable terms or in a timely fashion, or at all, particularly in the current economic environment, in which capital raising activities are especially challenging. Our inability to obtain adequate financing would likely result in the need to cease our business operations and would materially impair the value of your investment in our securities.

As a result of our failure to make certain payments, we and our subsidiaries are currently in default under various obligations, and we cannot determine the remedies our creditors may exercise.

We failed to make the payment in respect of the January 1, 2010 interest payment on our 14% Convertible Notes due January 1, 2014, referred to as the 14% convertible notes. In addition, we failed to make certain payments to Xergi, A/S, referred to as Xergi, under our Cooperation Agreement, dated April 23, 2009, referred to as the Cooperation Agreement, among us, our subsidiary, Microgy, Inc., Xergi and Danish Biogas Technology, A/S, referred to as DBT. Our subsidiary, Microgy Holdings, LLC, referred to as Microgy Holdings, failed to make the payments in respect to the December 1, 2009 interest payments on the remaining Texas tax-exempt bonds and California tax-exempt bonds on which it and its subsidiaries are obligated from its own funds. In

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addition, our subsidiary, Microgy Grand Island, LLC, failed to make payments in respect to the December 1, 2009 interest payments on the Nebraska tax-exempt bonds on which it is obligated from its own funds, and has other creditors which remain unpaid. We have been given notice of default under the indenture for the 14% convertible notes, but neither the holders nor the trustee thereunder have taken any further action with respect to such default. We have been given notice of default under the indentures for the Texas and California tax-exempt bonds, and the holders of the Texas and California tax-exempt bonds have accelerated the obligations associated with the bonds in full, but have not taken any further action to enforce their rights in any collateral. We have not been given notice of default under the indenture for the Nebraska tax-exempt bonds, and neither the holders nor the trustee thereunder have taken any action with respect to such default. Finally, we have been given notice of material breach of the Cooperation Agreement, but neither Xergi nor DBT has taken any further action with respect to such breach. We currently have outstanding past due and unpaid obligations of \$560,000 in respect of the 14% convertible notes, \$23,088,000 in respect of the Texas tax-exempt bonds plus accrued interest from December 1, 2009, \$8,356,000 in respect of the California tax-exempt bonds plus accrued interest from December 1, 2009, and \$300,000 in respect of payments owed to Xergi under the Cooperation Agreement, and \$1,334,000 in dividends on our series A preferred stock, among other amounts owed to other creditors. We currently do not have sufficient funds to pay any of these amounts.

We cannot predict what actions our creditors may take. Relevant agreements with Texas and California bondholders, entered into prior to the acceleration of obligations underlying the bonds, provide for cross-collateralization of all of the assets associated with our Huckabay Ridge facility, our Rio Leche and Cnossen projects in Texas, and our Riverdale and Hanford projects in California. The Nebraska tax-exempt bonds are secured by the assets associated with our Grand Island facility. Our other obligations are unsecured. The holders of the Texas, California and Nebraska tax-exempt bonds may take steps to foreclose on their collateral, although to date none has done so. Our creditors could also seek to initiate involuntary proceedings under the United States Bankruptcy Code, or we may determine that it is in our best interest to initiate such proceedings voluntarily. While we are in discussions with some of these creditors and other parties with respect to these obligations, we cannot assure you that any such discussions will result in a favorable resolution of these obligations. The foregoing circumstances, and the actions our creditors may elect to take with respect to them, are likely to result in a material adverse effect on our business as well as a material impairment of the value of your investment in our securities.

Our sole operating business, Microgy, has limited operating history from which to evaluate its business and products.

Our sole operating business, Microgy, was formed in 1999 and remains in the early stages of its development. Microgy is developing facilities that use environmentally friendly anaerobic digestion and other technologies to produce biogas from animal and organic wastes. Although Microgy has developed and operates three single digester facilities in Wisconsin and the multi-digester Huckabay Ridge facility, Microgy still has limited experience in the construction and operation of multiple digester facilities such as those Microgy is currently constructing or intends to construct, and limited experience in gas conditioning or the sale of gas as a commodity. In addition, Microgy experienced challenges during the startup and initial operation of the Huckabay Ridge facility that resulted in outages for corrective measures. We took advantage of such an outage to complete comprehensive upgrades to process-instrumentation and controls, the gas conditioning system, and the gas-collection system in order to achieve anticipated performance levels. While we gained valuable knowledge as to our processes and incorporated the lessons learned into future projects, we cannot assure you that similar challenges will not be encountered with respect to future facilities. Because of Microgy s limited experience, there is a risk that Microgy may never be profitable.

Microgy cannot predict when any facility will be completed, what Microgy s costs will be or, consequently, whether Microgy or any facility developed by Microgy will be profitable.

Development of Microgy s facilities is an inherently risky activity, subject to significant uncertainties and a lengthy development cycle. Uncertainties and risks include those relating to costs and availability of supplies and

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labor, costs and quality of facility components and installation services, fluctuations in the prices available for the sale of facility output and timing of completion of construction and commencement of commercial operations. Furthermore, obtaining the large number of agreements, permits and approvals necessary to develop, install, operate and manage any of Microgy s facilities, as well as to market the energy and other co-products and to provide necessary related resources and services, involves a long development cycle and decision-making process. Microgy is required to enter into or obtain some or all of the following in connection with the development of its facilities:

Off-take interconnection agreements;
Site agreements;
Supply contracts;
Design/build or other construction-related agreements;
Off-take agreements for gas produced;
Power sales contracts for facilities dedicated to the generation of electricity;
Agreements for the sale of greenhouse gas sequestration credits or other tradable environmental attributes;
Various co-product sales agreements;
Waste disposal agreements;
Environmental and other permits and licenses;
Government approvals; and

Financing commitments required for the successful completion of facilities under consideration.

Microgy s failure to accomplish any of these objectives could materially increase the cost, or prevent the successful completion of, development or operation of facilities and incur the loss of any investment made. Many of these objectives are dependent upon decisions by third parties. Delays in such parties decision-making process are outside of our control and may have a negative impact on our development costs, cost of operations, receipt of revenue and revenue projections. We expect that, in some cases, it may take a year or more to obtain decisions on permits and approvals and to negotiate and close these complex agreements. Such delays could harm our operating results and financial condition.

As a result of the foregoing uncertainties we are unable to project with certainty Microgy s organizational, structural, staffing or other overhead costs, the construction or operating costs associated with any facility, or whether any facility, or Microgy as a whole, will generate a profit. If Microgy fails to generate a profit, your investment in our securities will be materially, adversely affected.

If we are unable to obtain needed financing for Microgy s facilities, the value of our Microgy investment may be reduced significantly.

Because we have not yet generated sufficient positive cash flow, and do not expect to do so until at least 2012, we do not have adequate funds on hand to complete construction of the facilities we currently have planned. We are seeking and will require corporate, project or group financing to fund the cost of any development we may decide to pursue for Microgy s facilities. This financing may be difficult or impossible for us to obtain particularly in the current economic environment, in which capital raising activities are especially challenging. If we are unable to obtain such financing, the value of our Microgy investment may be reduced significantly, and we may be required to substantially curtail our business or completely cease construction or operation of any facilities. The availability of additional financing will depend on prospective lenders or investors review of our financial capabilities as well as specific facilities and other factors, including their

assessment of our ability to construct and manage each facility successfully and the current state of the economy. Such financing may not be available to us on acceptable terms, or at all. If we are unable to obtain the required financing, we will have to reduce the number of projects we construct and may even have to curtail or cease our business operations, which would have a material adverse effect on your investment in our securities.

If Microgy is unable to obtain sufficient manure and substrate for its facilities at an acceptable cost, such facilities, and Microgy as a whole, will likely not be profitable.

The performance of Microgy s facilities is dependent on the availability of large quantities of animal manure and substrates derived from animal and other organic waste resources to produce raw energy and meet performance standards in the generation of renewable natural gas. A substantial portion of the gas production of Microgy s facilities is derived from the co-digestion contribution enabled by substrate. While Microgy has or is expected to have agreements relating to the supply of manure and substrate, these agreements may not cover all of Microgy s requirements for such resources, and Microgy will be subject to the ability of the counterparties to such agreements to perform their obligations thereunder. Lack of manure or substrate or adverse changes in the nature or quality of such waste resources or the cost to supply or transport them would seriously affect the ability of Microgy s facilities to produce gas at profitable levels and, consequently, its ability to develop and finance facilities and to operate efficiently and generate income. As a result, its revenue and financial condition would be materially and negatively affected. We cannot assure you that the waste resources Microgy s facilities require will be available in the future in acceptable quantity or quality, for free or at prices that make them affordable or accessible.

Microgy is expected to derive a significant portion of its revenues from the sale of renewable natural gas; as a result it may have some exposure to volatility in the commodity price of natural gas.

Microgy is expected to derive a significant portion of its revenues from the sale of renewable natural gas. Microgy typically enters into medium to long-term off-take arrangements for the gas produced by its facilities as part of the planning and development of such facilities, and may enter into other hedging arrangements, in order to mitigate the associated commodity price risk. Furthermore, our subsidiary, Microgy Holdings, is required by the terms of its tax-exempt bonds to maintain certain gas price protection arrangements for specified periods of time. We believe that these arrangements will be considered normal purchases and sales and will not be subject to derivative accounting. However, there may be times when such off-take and hedging arrangements expire or otherwise terminate before new arrangements are put in place, and such arrangements are subject to the creditworthiness of the counterparties to them. In addition, we cannot assure you that any such risk management vehicles will always be available or successful. Because renewable natural gas commands a premium over, but still tracks prices for, conventional natural gas, Microgy will be exposed, to the extent not covered by long-term contracts, to market risk with respect to the commodity pricing of conventional natural gas. Historically, natural gas prices have been volatile and Microgy expects such volatility to continue.

We expect revenues from sales of greenhouse gas sequestration credits and other environmental attributes, but the market for such attributes is nascent and may not develop in a manner that allows us to profit from the sales of such credits to the level projected, or at all.

The multiple digester facilities that we plan to implement through Microgy Holdings and our other subsidiaries are expected to produce greenhouse gas sequestration credits and other marketable environmental attributes. While there exist trading markets for these attributes, and additional trading markets or other commercial avenues may develop, the existing trading markets are new and experience thin trading and price volatility, which can hinder sales of credits and make their value unpredictable. The quantity of credits that may be generated are a function of the carbon credit offset characteristics as determined by protocols used to document and verify the carbon offset value. These protocols continue to evolve, and changes in these protocols could substantially diminish further carbon credit eligibility. Furthermore, much of the participation in these markets is voluntary, in response to social and environmental concerns, as opposed to being driven by regulatory

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requirements. While many states and the federal government are pursuing or are considering carbon emissions limits and related initiatives that may spur greater development of and participation in these markets, we are unable to determine the effect of these initiatives on these markets. We cannot assure you that these trading markets will develop further, or even that they will continue to exist. In addition, many of our agreements with our business partners and investors require us to share such credits or any revenues we derive from sales of such credits, and agreements we negotiate in the future may also include such requirements. As a result of the foregoing, we may recognize significantly smaller revenues than we anticipate from the sale of greenhouse gas sequestration credits or other environmental attributes.

In connection with financial closings on projects, we have pledged all of our interests in our facilities in Texas and California as security for the loans relating to Microgy Holdings tax-exempt bond financings in those jurisdictions, and our subsidiary, Microgy Grand Island, LLC, has entered into a financing lease with respect to the Grand Island facility. We are in default on these loans and the bondholders could seek to initiate foreclosure proceedings on these assets.

We have invested, and expect to invest, substantial funds and resources in the Huckabay Ridge facility and the other multi-digester, renewable natural gas facilities in Texas, California and Nebraska. In connection with initial financial closings on the projects, we pledged all of our interest in the Huckabay Ridge facility, as well as the Rio Leche, Cnossen and Mission facilities in Texas as collateral security for the loan to our subsidiary, Microgy Holdings, from the Gulf Coast Industrial Development Authority of Texas relating to the \$60 million tax-exempt bond financing we completed in November 2006. The outstanding principal amount of these bonds has been reduced to \$23,088,711. We pledged all of our interest in the Riverdale and Hanford facilities in California as collateral security for the loan to our subsidiary, Microgy Holdings, from the California Statewide Communities Development Authority relating to the \$62.425 million tax-exempt bond financing we completed in September 2008. The outstanding amount of these bonds has been reduced to \$8,355,699. Both the Texas and California bonds are now in default and have been accelerated. While these loans are non-recourse to Environmental Power, in certain circumstances Environmental Power is required to provide at least 20% of the construction costs of these facilities, as well as to cover any cost overruns in construction and certain other significant costs, which if applicable would represent a substantial investment of corporate resources. Because Microgy Holdings is in default on these loans, bondholders by foreclosure proceedings could seek to seize some or all of our investment in the Texas and California facilities, which if successful would have a material adverse effect on our business, financial condition and results of operations as well as your investment in our securities. In addition, our subsidiary, Microgy Grand Island, LLC, has entered into a \$7.0 million sale and leaseback transaction with the City of Grand Island, Nebraska in connection with its tax-exempt bond financing in Nebraska to finance the construction of the Grand Island facility, and has guaranteed the City s obligations under the tax-exempt bonds. Environmental Power has equity contribution and support obligations with respect to the Grand Island facility that are substantially similar to those under the Texas and California financings. Microgy Grand Island is in default on its guarantee obligations to the City of Grand Island, and we may lose some or all of our investment in the Grand Island facility, which would have a material adverse effect on our business, financial condition and results of operations.

Microgy faces competition in the renewable energy market as well as for the resources necessary to operate its facilities.

Microgy plans to generate revenue from the development and ownership of facilities that market renewable green energy in addition to providing pollution control features to the agricultural and food industry markets.

Microgy s green competitors include other energy producers using biomass combustion, biomass anaerobic digestion, geothermal, solar, wind, new hydro and other renewable sources. These companies represent a significant class of competitors because they will compete with Microgy for sale of marketable renewable energy credits and participation in various renewable portfolios and other programs.

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Competition in the traditional energy business from electric utilities and other energy companies is well established, with many substantial entities having multi-billion dollar, multi-national operations. Many of these companies are beginning to compete in the alternative fuels and renewable energy business with the growth of the industry and the advent of many new technologies. Larger companies, due to their greater financial and other resources, will be better positioned than Microgy to develop new technologies and to install existing or more advanced renewable energy facilities, which could harm Microgy s business.

Microgy also faces many forms of competition with respect to the resources required to operate its facilities. Such competition includes other providers of pollution control, including environmental engineers, providers of pollution control systems, private companies, public companies, associations, cooperatives, government programs, foreign companies, and educational pilot programs. Furthermore, there are many companies that offer anaerobic digester systems. A number of these competitors have more mature businesses and have successfully installed anaerobic digester systems in the United States. Microgy may be forced to compete with any of these competitors for access to equipment, construction supplies, skilled labor for the construction and operation of its facilities and the supplies of manure and substrate required to operate its facilities. In addition, Microgy may also have to compete for access to substances that make desirable substrates with other users of these substances, such as recyclers of waste grease and producers of biodiesel and other biofuels. The effect of such competition could be reflected in higher costs associated with obtaining access to these resources, as well as an insufficient supply of these resources for the profitable operation of Microgy s facilities. If Microgy cannot obtain and maintain these supplies, or cannot obtain or maintain them at reasonable costs, the profitability of Microgy s business will be adversely affected.

#### Extreme weather events may have a material adverse effect on the operation on our facilities.

Microgy s facilities and sites are sensitive to extreme weather events. For instance, the anaerobic digestion process requires temperatures within a certain band, and extreme cold or heat may negatively impact the process or increase operating costs as a result of the need to counter such temperatures. Also, our sites contain retention ponds that have been designed with ample capacity to collect and retain storm water run-off, but, despite applying best maintenance practices, that capacity on rare occasions can be strained by severe rainfall. Thus, in August 2008, a 25-year record rainfall event caused a storm water retention pond breach and spill that required cleanup of a dry creek bed and reporting to the local environmental authorities, and earlier this year heavy rains saturated neighboring properties at Huckabay Ridge and thus significantly limited the ability of neighboring properties to utilize the plant s effluent, which we distribute pursuant to a commercial-fertilizer registration issued by the Texas State Chemist. While Microgy considers typical local weather conditions in the design of its facilities and maintains appropriate insurance to mitigate associated risks to the extent commercially feasible, Microgy cannot anticipate all unusual weather events, and such events have had and may in the future have a material adverse effect on the operation of its facilities.

It is possible that we may expend large sums of money on individual projects to bring Microgy s products to market and that the revenue that Microgy derives from these products from new projects may be insufficient to fund our operations.

Microgy s business approach to the renewable energy may not produce results as anticipated, be profitable or be readily accepted by the marketplace. We cannot estimate whether the gas produced by facilities based on Microgy s technology will materialize at anticipated prices, or whether satisfactory profit margins will be achieved. If such pricing levels are not achieved or sustained, or if Microgy s technologies and business approach to Microgy s markets do not achieve or sustain broad acceptance, our business, operating results and financial condition will be materially and negatively impacted.

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Because we have not filed patents to protect Microgy's intellectual property, we might not be able to prevent others from using Microgy's technology; conversely, others who have filed for patent or other protection might be able to prevent Microgy from using its technology.

Microgy has not filed any patent applications on any of its intellectual property. Should Microgy decide to file patent applications, we cannot assure you that any patent applications relating to Microgy s existing or future products or technologies will result in patents being issued, that any issued patents will afford adequate protection to Microgy, or that such patents will not be challenged, invalidated, infringed or circumvented. Furthermore, we cannot assure you that others have not developed, or will not develop, similar technologies that will compete with Microgy s without infringing upon Microgy s intellectual property rights or those of its licensor.

Third parties, including potential competitors, may already have filed patent applications relating to the subject matter of Microgy s current or future technology. In the event that any such patents are issued to such parties, such patents may preclude Microgy or its licensor from obtaining patent protection for its technologies, products or processes. In addition, such patents may hinder or prevent Microgy from commercializing its technology and could require Microgy to enter into licenses with such parties. We cannot assure you that any required licenses would be available to us on acceptable terms, or at all.

Microgy relies on confidentiality agreements and licensing agreements to maintain the proprietary nature of its technology. To compete effectively, Microgy may have to defend the rights to its intellectual property from time to time. Such defense costs may be significant and have a negative impact on our financial condition. In addition, we may lack the financial resources to adequately defend Microgy s intellectual property.

#### Microgy s facilities are likely to be subject to numerous governmental regulations.

We expect that Microgy s facilities are likely to be subject to various local, state and federal government regulations, including regulations covering air and water quality, solid waste disposal and related pollution issues. These regulations are mandated by the United States Environmental Protection Agency, or EPA, and state and local governments and are usually implemented through a permitting process, with ongoing compliance requirements thereafter. For example, grease-trap waste from restaurants and other food service providers is a desirable and highly available form of substrate for our facilities in Texas. However, the Texas environmental authorities required that we obtain a solid-waste permit for each of our planned facilities in Texas to the extent we desire to use grease-trap waste as substrate in the operation of such facilities. In addition, while we are authorized to distribute our effluent in Texas to neighboring properties pursuant to a commercial-fertilizer registration issued by the Texas State Chemist, the neighboring properties are still subject to regulations that require application of the effluent at agronomically sound rates. There are times when a customer has to curtail use of our liquid byproduct to prevent over-application, thereby necessitating that we find other outlets for the byproduct, potentially increasing operating costs, including provision for interim storage. We expect that all of our facilities will be required to obtain and comply with various environmental and other permits and approvals, which will vary from location to location. In addition, our activities will fall under a number of health and safety regulations and laws and regulations relating to farming and zoning. Compliance with these regulations and permitting requirements could delay the development of facilities and/or add to our operating costs on an interim or even a permanent basis and harm our financial condition or potentially require that we discontinue operations, depending upon the severity and durat

#### Microgy s facilities may become subject to regulations or taxes based on carbon or other emissions.

Microgy s facilities produce and emit into the atmosphere carbon dioxide and hydrogen sulfide as a result of the anaerobic digestion gas conditioning processes that they employ. While such facilities capture and thereby reduce the amount of methane, a potent greenhouse gas, that would otherwise enter the atmosphere, there are direct emissions of carbon dioxide, another greenhouse gas. As such, Microgy s facilities may still be subject to

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future federal or state legislation or regulation, or the implementation of international treaties, which seek to limit or impose a cost on greenhouse gas emissions. If any such legislation, regulations or treaties were implemented, Microgy may be required to expend resources to capture the carbon dioxide it produces, pay a tax on its carbon dioxide emissions, purchase greenhouse gas sequestration credits, reduce the greenhouse sequestration credits claimed for such facilities or take similar actions. In addition, Microgy could become subject to federal, state and local taxes and regulations regarding its other emissions. Any of the foregoing could harm the profitability of Microgy s facilities.

Our operating results are difficult to predict in advance and may fluctuate significantly, which may result in a substantial decline in our stock price.

Our operating results are difficult to predict in advance and may fluctuate significantly, and a failure to meet the expectations of analysts or our stockholders would likely result in a substantial decline in our stock price.

Factors that are likely to cause our results to fluctuate include the following:

the amount and timing of our operating expenses and capital expenditures;

the success or failure of the facilities currently underway;

our ability to specify, develop and complete facilities, and to introduce and market the energy created by such facilities and bring them to volume production in a timely manner;

the rate of adoption and acceptance of new industry standards in our target markets; and

other unforeseen activities or issues.

If our operating results fluctuate greatly, our business may be materially adversely affected and our stock price will likely decline.

#### Risks Relating to Our Capital Stock

We have numerous outstanding shares of restricted common stock, as well as options, warrants and shares of preferred stock exercisable or convertible into a substantial number of shares of our common stock; the resale of outstanding restricted shares, as well as the exercise or conversion of these securities and the resale of the underlying shares, may adversely affect the price of our common stock.

The resale by our stockholders of shares of our restricted common stock or securities exercisable for or convertible into shares of our common stock could cause the market price of our common stock to decline.

A significant portion of our outstanding shares of common stock had been restricted from immediate resale, but is now available for sale in the market pursuant to Rule 144 under the Securities Act of 1933. As of December 31, 2009, we had approximately:

15,803,034 shares of our common stock are issued and 15,708,591 shares are outstanding, of which 1,212,726 shares of common stock outstanding are restricted securities within the meaning of Rule 144 and 117,625 shares are subject to vesting pursuant to restricted stock awards granted to certain employees; and

2,823,659 shares of common stock issuable upon conversion of our series A preferred stock;

all of which shares, other than employee restricted stock awards subject to vesting, are eligible for resale without volume and manner of sale restrictions in accordance with Rule 144, except to the extent held by our affiliates. We are currently authorized to issue 50,000,000 shares of common stock.

In addition, in connection with our sale of shares of our series A preferred stock and common stock warrants on November 9, 2006, we filed a registration statement to permit the resale of up to 4,387,360 shares of common

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stock issuable upon conversion of such shares of series A preferred stock and exercise of such warrants, which registration statement is currently effective. The shares of series A preferred stock were convertible at a conversion price of \$5.27 per share, and the common stock warrants were exercisable at a price of \$5.52 per share as to 1,406,205 of the warrants, and \$5.27 per share as to 168,745 of the warrants. In October 2007, the exercise price of the warrants was reduced to \$5.25 per share, and the preferred stock conversion price was reduced to \$5.25 per share as a result of anti-dilution adjustments triggered by the issuance of common stock in the October 2007 public offering, resulting in an increase of 11,250 in the number of shares of our common stock issuable upon conversion of the series A preferred stock.

In May 2007, we issued to Cargill, Incorporated warrants to purchase 175,912 shares of our common stock at an exercise price of \$5.37 per share, representing 1% of our fully diluted common stock at the time, as required by a business development agreement with Cargill that expired in 2009.

On March 13, 2009, we closed on the sale of \$5 million original principal amount of our 14% convertible notes due January 1, 2014. These notes are convertible into an aggregate of up to approximately 925,926 shares of our common stock, based upon the minimum conversion price of the notes, all of which shares may be sold by the holders thereof without restriction, except to the extent held by our affiliates.

On May 22, 2009 we issued an additional \$3 million original principal amount of the notes as payment for certain license fees to the licensor of Microgy s technology in a private placement transaction. These notes are convertible into up to approximately 555,556 shares of common stock, based upon the minimum conversion price. These shares are restricted securities within the meaning of Rule 144.

As of December 31, 2009, we had outstanding options, warrants and stock appreciation rights to acquire up to approximately 5,096,536 shares of our common stock at prices ranging from \$0.20 to \$8.89 per share, with a weighted average exercise price of \$4.51 per share and an average remaining contractual term of 3.8 years. The shares of common stock issuable upon exercise of these options will be freely transferable without restriction, except to the extent that they are held by our affiliates. Any shares held by our affiliates may only be sold in compliance with the volume limitations of Rule 144. These volume limitations restrict the number of shares that may be sold by an affiliate in any three-month period to the greater of 1% of the number of shares then outstanding, which equals approximately 157,000 shares as of December 31, 2009, or the average weekly trading volume of our common stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

As a result of the resale of outstanding shares of our common stock, including restricted shares and shares issuable upon exercise or conversion of the foregoing securities, the price of our common stock may be adversely affected.

The issuance of preferred stock may adversely affect the value of our common stock or make it more difficult for a party to acquire a controlling interest in our company.

We are authorized to issue up to 2,000,000 shares of preferred stock, of which 281,241 shares have been designated as series A 9% cumulative convertible preferred stock, referred to as the series A preferred stock, and which are currently issued and outstanding. The preferred stock not already designated and issued may be issued in series from time to time with such designations, rights, preferences and limitations as our board of directors may determine by resolution without stockholder approval. While the terms of the series A preferred stock do not currently allow for the issuance of preferred stock having dividend and liquidation preferences greater than or senior to the series A preferred stock, any future issuances of preferred stock may enjoy dividend and liquidation preferences over our common stock, thereby diminishing the value of our common stock. Furthermore, the issuance of preferred stock, as well as any authorized but unreserved common stock, while providing flexibility in connection with possible future financings or acquisitions and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a controlling interest in our company.

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Our management and directors, as well as the holders of our series A preferred stock, are able to exercise significant control over our management and affairs.

As of December 31, 2009, executive officers and directors, including Richard E. Kessel, Joseph E. Cresci, Roger Ballentine, Kamlesh R. Tejwani, Robert I. Weisberg, John R. Cooper, August Schumacher, Jr., Lon Hatamiya, Steven Kessner, Michael E. Thomas and Dennis Haines, beneficially owned approximately 17.5% of our outstanding common stock. In addition, the three holders of our series A preferred stock, two of which are affiliated with each other, control approximately 18.3% of the total number of votes currently entitled to be cast at any meeting of our stockholders. While there are no voting agreements among them, such persons, as a group, may be able to exercise some level of control over the outcome of matters submitted for stockholder action, including the election of members to our board of directors and the approval of significant change in control transactions. This may have the effect of delaying or preventing a change in control of our company and, therefore, your opportunity to sell your shares in such a transaction. Furthermore, the holders of our series A preferred stock have special approval rights with respect to certain changes to our certificate of incorporation and certain other corporate actions.

#### The lack of a developed trading market may make it difficult for you to sell shares of our common stock.

While our common stock is currently listed for trading on the Nasdaq Capital Market, trading activity in our common stock has fluctuated and has at times been limited. For example, for the one-month period from December 1, 2009 to December 31, 2009, our daily trading volume ranged from a low of 9,700 shares to a high of 969,200 shares, and averaged 255,000 shares a day. We cannot guarantee that a consistently active trading market will develop in the future. As a result, a holder of our common stock may find it difficult to dispose of our common stock.

If we fail to continue to meet all applicable continued listing requirements of The Nasdaq Capital Market and Nasdaq determines to delist our common stock, the market liquidity and market price of our common stock could decline.

Our common stock is currently listed on The Nasdaq Capital Market. In order to maintain that listing, we must satisfy minimum financial and other listing requirements. Among these requirements is that our common stock maintain a minimum closing bid price of at least \$1.00 per share. On March 16, 2010, we received notice from Nasdaq that we were not in compliance with the \$1.00 minimum bid requirement for continued listing and that our securities would be delisted. As permitted under the Nasdaq rules we have appealed this decision which will defer any delisting until after the appeal is heard in 30 to 45 days. We will consider available options to regain compliance with the minimum bid price requirement. Nasdaq has informed us that the only historically acceptable definitive plan for regaining compliance is a reverse stock split. We are unable to determine if we will be successful with our appeal and may in any event determine it is in the best interest of our company to delist our securities even if our appeal is successful. We disclaim any intention or obligation to update the statements in this report for purposes of disclosing any action or response that we decide to take after the date hereof.

If our stock is delisted, an active trading market for our common stock may not be sustained and the market price of our common stock could decline. In addition, the delisting of our common stock would also trigger a right on the part of the holders of our outstanding shares of series A preferred stock to increase the cumulative dividend rate on such shares from 9% per year to 16% per year and such holders may claim other damages. We cannot assure you that we will not ultimately fail to comply with Nasdaq listing standards or voluntarily decide to delist our stock from The Nasdaq Capital Market.

#### The market price for our common stock has been and may continue to be volatile.

The market price for our common stock has been volatile, and it is likely to continue to be so. For instance the price of our common stock reached a high of \$1.09 in the first quarter of 2009 and a low of \$0.14 in the fourth quarter of 2009. While we cannot state with any certainty the specific reasons for the recent volatility of

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our stock price, we believe that such volatility could be due to the current financial recession and related economic uncertainties and their impact on the stock market generally as well as on the stock prices of early stage companies such as ours, in addition to the risks and uncertainties regarding our business described elsewhere in this report. In addition, the market price for our common stock could be subject to significant fluctuations in response to variations in quarterly operating results, announcements of technological innovations or new facilities and products by us or our competitors, or our failure to achieve operating results consistent with any securities analysts projections of our performance. Furthermore, the stock market has experienced extreme price and volume fluctuations and volatility that have particularly affected the market price of many emerging growth and development stage companies such as ours. Such fluctuations and volatility have often been unrelated or disproportionate to the operating performance of such companies. As a result of fluctuations related or unrelated to our performance, the value of our common stock may be materially adversely affected.

We will require and are actively seeking significant additional financing, which may result in our issuing a significant number of shares of our common stock or preferred stock, which in turn may dilute the value of your shares.

We continue to work with our financial advisors to identify and explore various opportunities to raise the capital we require. However, we cannot assure you that we will be able to raise sufficient capital on acceptable terms, or at all. The level of funds we are able to raise, if any, will determine the level of development and construction activity that we can pursue and whether we will be able to continue as a going concern. We will require and will continue to seek corporate and project financing to fund our ongoing overhead and growth plans as well as the cost of any development we may decide to pursue for our facilities. Without limiting the foregoing, as described elsewhere in this annual report, we will have to raise significant additional financing in the first half of 2010 in order to fund ongoing general and administrative expenses associated with our corporate overhead as well as debt service and dividend requirements and to continue as a going concern. We cannot assure you that such capital will be available in sufficient amounts or on terms acceptable to us, if at all. Any such financing could be in the form of debt or equity instruments or a combination of debt and equity instruments. To the extent any such financing involves equity or convertible debt, we may issue a significant number of shares of our common stock or preferred stock, which will dilute an existing investment in our common stock, and we may issue such shares at prices that may be lower than the price paid for our common stock by our stockholders. In addition, if we issue shares of preferred stock, such preferred stock may have rights and preferences that are superior to those of our common stock. Because we are authorized to issue shares of additional series of preferred stock, as designated by our board of directors, subject to certain limitations included in the terms of our series A preferred stock, we may issue more shares of preferred stock in the future.

Issuances of common stock or securities convertible into common stock in the future could dilute existing stockholders and adversely affect the market price of our common stock. We may issue shares of common stock or securities convertible into common stock at values below our market price up to a maximum of 19.9% of our outstanding common stock without stockholder approval, which values may be substantially below the price paid for our common stock by our stockholders. We also do not need stockholder approval to issue an unlimited number of shares of common stock or securities convertible into common stock (provided sufficient shares of common stock are authorized and unreserved) at or above the market price for our common stock pursuant to certain Nasdaq Capital Market requirements. Any such issuances could be at values below the price paid for our common stock by our stockholders.

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Our outstanding series A preferred stock has rights and preferences superior to that of our common stock, may impair our ability to raise additional financing, may harm our financial condition if we are required to redeem it and could have the effect of discouraging an acquisition or reducing the amount of proceeds available to common stockholders upon such an acquisition.

Our shares of series A preferred stock have rights and preferences which are superior to those of our common stock, including:

an accruing dividend of 9% on the stated value of each outstanding share of series A preferred stock, payable before the payment of any dividends on our common stock;

a preference upon liquidation, dissolution or winding up of Environmental Power equal to 200% of the stated value of each share of preferred stock, plus any accrued but unpaid dividends;

the right to consent to certain changes to our certificate of incorporation and bylaws, and certain other significant corporate actions; and

the right to a payment equal to 150% of the stated value of each outstanding share of Series A preferred stock upon certain change-in-control events.

Our series A preferred stock may also have a material adverse effect on our financial condition and results of operations. With certain exceptions, including exceptions for permitted indebtedness, as defined, we have agreed to limit our ability to incur additional indebtedness while such preferred stock is outstanding. Subject to other exceptions, we have also agreed with series A holders not to issue stock senior to or on a par with series A preferred stock. These constraints could materially and adversely affect our ability to raise funds necessary to continue our business. In addition, the series A preferred stock provides for various triggering events, such as our common stock not being listed for trading on the American Stock Exchange, Nasdaq Global Market, Nasdaq Capital Market or New York Stock Exchange, the failure to deliver shares of our common stock upon conversion and specified change of control transactions. Several other triggering events are described in the certificate of designations, preferences and rights of the series A preferred stock. If one of these triggering events occurs, we may be required to redeem all or part of the outstanding shares of series A preferred stock at 120% of their stated value (150% in the case of certain change in control transactions), including payment of accrued dividends and penalties, or the dividend rate on the series A preferred stock may be increased from 9% per year to 16% per year, depending on the triggering event and the elections made by the holders of the series A preferred stock. Some of the triggering events include matters over which we may have some, little, or no control. Any such redemption could leave us with little or no working capital for our business. Furthermore, by virtue of their voting power and other rights and preferences, the outstanding series A preferred stock could have the effect of blocking or discouraging certain acquisitions of our company or reducing the proceeds available to common stockholders as a result of any such acquisit

#### We do not intend to pay cash dividends on our common stock.

We have not paid cash dividends on our common stock since 2001, and we do not expect to pay cash dividends on our common stock at any time in the foreseeable future. The future payment of dividends directly depends upon the future earnings, capital requirements, financial requirements and other factors that our board of directors will consider, and is subject to the prior payment of all accrued but unpaid dividends on our series A preferred stock. Furthermore, the terms of our series A preferred stock prohibit the payment of dividends on our common stock while any shares of our series A preferred stock are outstanding. Because we do not anticipate paying cash dividends on our common stock, the return on any investment in our common stock will depend solely on a change, if any, in the market value of our common stock.

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#### Item 1B. Unresolved Staff Comments

Not applicable.

#### Item 2. Properties

In the ordinary course of our business, we currently lease office space in Golden, Colorado and Tarrytown, New York. The office space in Golden, Colorado has been subleased to a third party. We believe this office space, including the space for our corporate headquarters, located in Tarrytown, New York, is replaceable at reasonable rates.

Microgy Holdings wholly-owned subsidiary, MST Estates LLC, owns approximately seventy-two acres of land in Erath County, Texas, which is the site on which the Huckabay Ridge facility is located. We believe the company s Huckabay Ridge facility is the largest renewable natural gas plant of its kind in North America. The plant generates methane-rich biogas from manure and other agricultural waste, conditions it to natural gas standards and distributes it through a commercial pipeline. Huckabay Ridge consists of eight anaerobic digesters that extract methane-rich biogas from waste to produce energy. This property is subject to a mortgage securing the obligations under our Texas and California tax-exempt bonds.

Microgy Holdings wholly-owned subsidiary, Rio Leche Estates L.L.C., owns approximately ninety-two acres of land in Dublin, Texas, which is the site on which the planned Rio Leche facility would be located. This property is subject to a mortgage securing the obligations under our Texas and California tax-exempt bonds.

In addition to the foregoing, in the ordinary course of our business, certain of the company s operating subsidiaries enter into long-term leases with nominal annual rent authorizing construction and operation of our facilities on various host properties.

#### Item 3. Legal Proceedings

We are not currently a party to any material legal proceedings.

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#### EXECUTIVE OFFICERS OF THE REGISTRANT

Our executive officers, their ages and their positions as of February 28, 2010 are set forth below:

Name Age Position

Richard E. Kessel 60 President and Chief Executive Officer and President
Michael E. Thomas 50 Senior Vice President, Chief Financial Officer and Treasurer

Dennis Haines 57 Vice President, General Counsel and Secretary

Richard E. Kessel has been our President and Chief Executive Officer since July 2006. From October 2003 to July 2006, Mr. Kessel was President and Chief Executive Officer of Bedford Partners, a consulting firm assisting private equity firms in acquiring energy, water, waste and other service related enterprises. From July 1, 2002 to September 30, 2003, Mr. Kessel served as the President and Chief Executive Officer for North America, and a Senior Vice President of, Suez Environment, an international company focused on water, wastewater and waste services. The North American operations overseen by Mr. Kessel were comprised of five companies with over 9,200 employees, \$1.3 billion in annual revenues and \$1.5 billion in assets. Mr. Kessel served as President and Chief Executive Officer of Trigen Energy Corporation, an energy services company with \$1 billion in assets, \$533 million in annual revenue and 34 operating facilities in 22 states, from April 1, 2000 to June 30, 2002, after serving as its Executive Vice President and Chief Operating Officer from December 1993 to March 31, 2000. Previously, Mr. Kessel was President and Chief Executive Officer of United Thermal Corporation (acquired by Trigen), which owned and operated the district energy systems in Baltimore, Boston, Philadelphia and St. Louis, and Chief Operating Officer of Sithe Energies, Inc., a developer of independent power projects in the United States and global markets. Mr. Kessel serves on the board of directors of ISO New England, Inc., the operator of the New England region s bulk power system and wholesale electricity markets. Mr. Kessel holds a B.S. in electrical engineering from Manhattan College, completed the course work for a masters in finance from New York University s Stern School of Business and received an advanced management degree from the Wharton School of Business Executive Program.

Michael E. Thomas has been our Senior Vice President and Chief Financial Officer since May 2007 and became Treasurer in June 2007. From January 2007 to May 2007, Mr. Thomas was the principal of MET Consulting, LLC, a business and financial services consulting firm. From January 1999 to December 2006, Mr. Thomas was Vice President, Chief Financial Officer for Maine Yankee Atomic Power Company. From October 2004 to December 2006, Mr. Thomas served as Vice President and Chief Financial Officer for Connecticut Yankee Atomic Power Company and from December 2004 to December 2006 as Vice President and Chief Financial Officer for Yankee Atomic Electric Company. In these capacities, Mr. Thomas had responsibility for financial reporting, investment management, risk management and treasury functions, as well as human resources responsibilities for these three utilities, which had combined assets of over \$1 billion and substantially completed decommissioning programs for the three nuclear power plants owned by them during Mr. Thomas tenure. From 1991 to 1999, Mr. Thomas held various other finance positions with Maine Yankee Atomic Power Company, including Manager of Financial Services and Vice President and Treasurer. From 1984 to 1989, Mr. Thomas held various finance positions with Central Maine Power Company, including Senior Financial Analyst and Director of Treasury Operations. Mr. Thomas holds a bachelor s degree with a major in economics from Bowdoin College and an MBA from the University of Southern Maine.

Dennis Haines has been our Vice President and General Counsel since October 2006 and Secretary since June 2007. For the last several years, Mr. Haines took on various assignments with Suez, a worldwide energy and environmental services provider, including serving as General Counsel at Teris L.L.C., a Suez subsidiary, from July 2005 to August 2006. From January 2003 to February 2005, Mr. Haines provided legal support to various other Suez units, including operations in Nova Scotia and the United Kingdom. From January 2001 to December 2002, Mr. Haines served as General Counsel at Trigen Energy Corporation, White Plains, NY, part of Suez Energy International. Mr. Haines was also General Counsel & Secretary at Zurn Industries, Inc., Erie, PA, an NYSE-traded company which, through Zurn/NEPCO, specialized in the design and construction of power-generation facilities worldwide. Mr. Haines is a graduate of the University of Pittsburgh (J.D., 1977, and B.A., 1974), and a member of the New York, California, and Pennsylvania Bars.

#### PART II

## Item 5. Market for Registrant s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities Market Price of and Dividends on Environmental Power s Common Stock and Related Stockholder Matters

Our common stock currently trades on the Nasdaq Capital Market under the symbol EPG. As of December 31, 2009 there were approximately 215 record holders and over 5,500 beneficial holders of our common stock.

The following table shows the high and low sales prices for our common stock as reported on the Nasdaq Capital Market for each of the quarters in the years ended December 31, 2008 and 2009, respectively.

	High	Low
Fiscal Year Ended December 31, 2008		
First Quarter	\$ 6.25	\$ 3.65
Second Quarter	5.62	3.94
Third Quarter	4.60	1.62
Fourth Quarter	2.25	0.28
	High	Low
Fiscal Year Ended December 31, 2009	High	Low
Fiscal Year Ended December 31, 2009 First Quarter	<b>High</b> \$ 1.09	Low \$ 0.25
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First Quarter	\$ 1.09	\$ 0.25

Our board of directors has not declared any dividends on our common stock since the last quarter of 2000. Due to the anticipated continued expansion of our business, our board of directors has determined that available cash should be used for operating and investing activities for the foreseeable future, except to the extent of cash dividends required to be paid on outstanding shares of our series A 9% cumulative convertible preferred stock, referred to as the series A preferred stock. In addition, the terms of our series A preferred stock prohibit the payment of dividends on our common stock while any shares of our series A preferred stock remain outstanding or any accrued dividends on the series A preferred stock remain unpaid. As of January 1, 2010, \$1,334,179 in preferred dividends were accrued and unpaid.

#### Calculation of Aggregate Market Value of Non-Affiliate Shares

For purposes of calculating the aggregate market value of shares of our common stock held by non-affiliates as set forth on the cover page of this Annual Report on Form 10-K, we have assumed that all outstanding shares are held by non-affiliates, except for shares held by each of our executive officers, directors and 5% or greater stockholders. In the case of 5% or greater stockholders, we have not deemed such stockholders to be affiliates unless there are facts and circumstances which would indicate that such stockholders exercise any control over our company, or unless they hold 10% or more of our outstanding common stock. These assumptions should not be deemed to constitute an admission that all executive officers, directors and 5% or greater stockholders are, in fact, affiliates of our company, or that there are not other persons who may be deemed to be affiliates of our company. Further information concerning shareholdings of our officers, directors and principal stockholders is included or incorporated by reference in Part III, Item 12 of this Annual Report on Form 10-K.

#### Recent Sales of Unregistered Securities; Uses of Proceeds from Registered Securities

Not applicable.

#### COMPARATIVE STOCK PERFORMANCE GRAPH

The following graph compares the cumulative stockholder return on our Common Stock with the return on the Nasdaq Index, which represents other similarly sized issuers traded on The Nasdaq Capital Market, where our common stock trades and SIC Code 1311 (Crude Petroleum & Natural Gas), which represents an index for the industry which we believe to be most comparable to that in which most of our business is now conducted, in each case for the five year period ended December 31, 2009. The comparison assumes an investment of \$100 on January 1, 2005 in each of our common stock, the Nasdaq Index, and the SIC Code 1311 and assumes the reinvestment of dividends.

The graph below and related information shall not be deemed soliciting material or filed with the Securities and Exchange Commission or otherwise subject to the liabilities of Section 18 of the Exchange Act, nor shall such information be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act, except to the extent we specifically request that such information be treated as soliciting material or specifically incorporate such information by reference into a document filed under the Securities Act or the Exchange Act.

#### Item 6. Selected Financial Data

This section presents our historical consolidated financial data. You should read carefully the following selected consolidated financial data together with our consolidated financial statements and the related notes included in this report, and the Management s Discussion and Analysis of Financial Condition and Results of Operations section of this report. The selected consolidated financial data in this section are not intended to replace our consolidated financial statements.

We derived the statements of operations data for the years ended December 31, 2009, 2008 and 2007 and the balance sheet data as of December 31, 2009 and 2008 from our audited consolidated financial statements, which are included in this annual report on Form 10-K. We derived the statements of operations data for the years ended December 31, 2006 and 2005 and the balance sheet data as of December 31, 2007, 2006 and 2005 from our audited consolidated financial statements not included in this report. Historical results are not necessarily indicative of future results. You should read the notes to our consolidated financial statements for an explanation of the method used to determine the number of shares used in computing basic and diluted net loss per share.

		Year Ended December 31			
Amounts in thousands except per share amounts	2009	2008	2007	2006	2005
Results of Operations Data:					
Revenues	\$ 4,711	\$ 2,905	\$ 1,175	\$ 2,216	\$ 4,088
Costs and expenses:					
Operations and maintenance	3,607	7,118	942	2,099	6,116
Impairment of assets	26,070	4,913			
General and administrative expenses	6,408	12,003	12,444	11,229	6,810
Depreciation and amortization	1,541	1,359	304	299	250
Total Costs and Expenses	37,626	25,393	13,690	13,627	13,176
Operating Loss	(32,915)	(22,488)	(12,515)	(11,411)	(9,088)
Other income (expense):	40	10=	=0.0	4.40	200
Interest income	42	487	783	448	233
Interest expense	(3,344)	(969)	(12)	(9)	(6)
Other income	134		584		33
m · L · d · · · · · · · · · · ·	(2.160)	(400)	1 255	120	260
Total other income (expense)	(3,168)	(482)	1,355	439	260
Net Loss before Income Taxes	(36,083)	(22,970)	(11,160)	(10,972)	(8,828)
Income tax expense	29	26	1	427	12
Net Loss from Continuing Operations	(36,112)	(22,996)	(11,161)	(11,399)	(8,840)
Net Income (Loss) from Discontinued Operations	(= -, ,	6,989	(6,196)	(2,716)	(2,574)
•					
Net Loss	(36,112)	(16,007)	(17,357)	(14,115)	(11,414)
Preferred Securities Dividend Requirements	(1,334)	(1,326)	(1,348)	(198)	(5)
Beneficial Conversion Feature of Preferred Stock			(57)	(4,131)	
Change in Value of Modified Warrants			(98)		
Net Loss Applicable to Common Shareholders	\$ (37,447)	\$ (17,333)	\$ (18,860)	\$ (18,444)	\$ (11,419)
Weighted average number of common shares outstanding on a					
diluted basis	15,587	15,579	11,339	9,635	7,384
Basic and Diluted Net Income (Loss) per Common Share	\$ (2.40)	\$ (1.11)	\$ (1.66)	\$ (1.91)	\$ (1.55)
From Continuing Operations	(2.40)	(1.56)	(1.12)	(1.63)	(1.20)
From Discontinued Operations		0.45	(0.54)	(0.28)	(0.35)
<b>Balance Sheet Data (Continuing Operations):</b>					
Total assets	\$ 42,747	\$ 162,013	\$ 113,049	\$ 93,051	\$ 27,705
Working capital, including restricted cash	(48,594)	103,746	70,208	64,261	14,176
Long-term obligations	1,432	129,475	60,658	60,717	645
Common Shareholders equity (deficit)	(19,481)	17,718	33,115	18,521	25,697

#### Item 7. Management s Discussion and Analysis of Financial Statements and Results of Operations

You should read the following discussion and analysis of financial condition and results of operations together with the Selected Consolidated Financial Data section of this annual report on Form 10-K and our consolidated financial statements and accompanying notes appearing in this report. In addition to historical information, the following discussion contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results could differ materially from those anticipated by the forward looking statements due to important factors including, but not limited to, those set forth in Part I, Item IA-Risk Factors appearing elsewhere in this report.

#### **OVERVIEW**

Environmental Power is a developer, owner and operator of renewable energy production facilities. Environmental Power s goal is to produce energy that is Beyond Renewable , which Environmental Power defines as energy that not only is derived from waste materials instead of precious resources, but energy that is also clean and reliable. Environmental Power and its subsidiaries develop and own facilities that, unlike many renewable energy facilities, are intended to be profitable without the need for federal tax subsidies. Any such government assistance would, however, benefit Environmental Power s facilities by increasing their potential for profitability, while at the same time expanding opportunities for the profitable deployment of such facilities. Environmental Power believes that a number of factors, including volatile energy prices, greater desire for renewable energy sources, more stringent environmental and waste management requirements imposed on farmers and food industry waste producers, and revenue opportunities from carbon sequestration credits will continue to provide favorable market conditions for its business.

In the past, we have operated in two major segments, through Microgy, Inc., as a developer of renewable energy facilities for the production and commercial application of methane-rich biogas from agricultural and food industry and other organic wastes, and through EPC Corporation and its subsidiary, Buzzard Power Corporation, referred to as Buzzard, the holder of a leasehold interest in a waste-coal fired generating facility in Pennsylvania known as the Scrubgrass facility. On May 31, 2007, our board of directors authorized management to enter into negotiations regarding the disposition of the leasehold interest in the Scrubgrass facility. On February 29, 2008, we completed the disposition of the leasehold interest. As a result, for financial reporting purposes, we are now consolidating all segments of continuing operations and reporting the results of Buzzard as discontinued operations. We thus now operate only in Microgy s segment.

Microgy is a developer of renewable energy facilities for the production and commercial application of methane-rich biogas produced from animal, food industry and other organic wastes. The biogas can be sold to end-users or used to produce pipeline-grade methane, which Microgy refers to as renewable natural gas, or RNG®, liquefied natural gas, or LNG, compressed natural gas, or CNG, renewable electrical energy or thermal energy, as well as other useful by-products. Microgy systems utilize a proven European biogas production technology. In addition, Microgy has developed significant engineering, construction and process knowledge regarding these systems.

Due to the increased demand for renewable energy Microgy believes that its systems can be profitable without the need for federal subsidies, rebates, or grants. Nevertheless, Microgy believes that tax credits and other such incentives may be available in the future to Microgy s facilities, and such incentives would serve to enhance the potential profitability of its facilities. Future climate change legislation, if any, may enhance the value of Microgy s products. In addition, the energy output from Microgy s systems may carry a premium price in some areas, as numerous environmentally responsible entities are seeking renewable energy sources and many states have either passed or are considering legislation requiring utilities to obtain or generate a certain percentage of their power from renewable sources.

In addition to the value generated from the production and sale of renewable gas, our facilities produce soil amendment products that can be used as a bedding, compost or peat moss and liquid fertilizer that can be used

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for crop growth. We believe that our facilities can generate additional environmental benefits with significant economic and social value by providing a valuable waste management solution for farms and other producers of organic wastes, such as those in the food industry. Federal and state agencies have either passed or are considering regulations that require concentrated animal feeding operations, referred to as CAFOs, to implement changes to their current waste management practices. We believe that these increasingly stringent environmental regulations will be another factor creating opportunities for the deployment of our systems.

Microgy intends to continue to focus on its strategy of developing large-scale, standardized facilities utilizing an ownership model either entirely or together with financial or operating partners. Under this model Microgy will construct, own and operate facilities and profit from the ongoing sale of biogas or RNG® as well as sales of greenhouse gas sequestration credits or other marketable environmental benefits. This strategy encompasses the construction and operation of stand-alone merchant plants like the Huckabay Ridge facility described below, as well as facilities dedicated to the needs of a single customer at one or more customer locations, such as the Grand Island facility described below. By pursuing this strategy, Microgy intends to accumulate gas production and carbon sequestration capacity over time. In addition, Microgy continues to standardize both its system design and its approach to the marketplace in order to allow for a cost-effective scale-up of its business.

Having constructed both the multi- and single-tank system in four currently operating installations, Microgy intends to own the digester systems it develops, either outright, through an affiliated company, or in substantial part, through HMI Energy, LLC, a joint-venture company formed in January 2010 (discussed further below), in which Microgy owns 30% of the membership interests. Our multi-digester facilities will primarily produce pipeline-quality renewable natural gas, although we will also consider opportunities to produce and sell conditioned biogas, electricity, compressed natural gas, referred to as CNG, or liquid natural gas, referred to as LNG, from our facilities. Microgy s development efforts are focused on applications of its technology that are resource efficient. Development of smaller scale and single-digester facilities will be targeted toward customers that have multiple sites and opportunities that have shorter development cycles.

Microgy s efforts have resulted, most recently, in the start of commercial operations at the Huckabay Ridge facility in Stephenville, Texas, which began commercial operations in the first quarter of 2008. Huckabay Ridge consists of eight 916,000-gallon digesters which operate together to process the manure from approximately 10,000 cows and produce 575,000 MMBtus of RNG® annually. The gas is treated and compressed to produce pipeline grade methane that is sold and delivered directly into nearby natural gas pipelines. Huckabay Ridge is expected to produce approximately 782,000 million British Thermal Units, or MMBtus, of pipeline-grade methane for sale per year once a planned combined heat and power, or CHP, system has been installed and potential modifications made to the gas processing systems.

We have two other multi-digester facilities in development in Texas having expected output of 670,000 MMBtus. We have also announced three proposed multi-digester RNG® facilities in California, and a proposed multi-digester RNG® facility in Colorado. These projects are in various stages of development. In January 2010, Microgy contributed its interest in one of the California projects and the Colorado project to the new joint venture, HMI Energy, LLC, described below.

Microgy has commenced construction of a multi-digester renewable biogas facility to be located at the flagship Grand Island, Nebraska beef processing plant of JBS Swift & Company, referred to as Swift. Under the terms of the agreement with Swift, Microgy will construct, own and operate the facility and sell its gas output to Swift for use in its operations to offset natural gas utilization pursuant to a 15-year gas purchase agreement. The Grand Island facility will consist of two 1.3 million gallon digesters that will process wastes generated by the Grand Island processing facility and that we expect will be able to produce approximately 235,000 MMBtus per year. We completed \$7.0 million in tax-exempt bond financing in Nebraska in July 2008 to finance a portion of the construction costs of the Grand Island facility. However these bonds are currently in default and the trustee or

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25% of the bondholders could accelerate the bonds and demand repayment at any time. We are currently seeking a solution to these circumstances, including the financing to complete construction of the facility, but we cannot assure you that we will be successful in doing so on favorable terms, or at all.

In addition, Microgy is operating three single digester facilities in Wisconsin. Microgy sold these projects to the farms on which they are located, and developed them in conjunction with Dairyland Power Cooperative, an electric cooperative utility, referred to as Dairyland. The biogas from these projects is used by Dairyland to generate electricity. In January 2010, Microgy contributed the rights to the net revenues of the Wisconsin facilities to HMI Energy, LLC.

#### **Discontinued Operations**

The disposition of Buzzard s leasehold interest in the Scrubgrass facility was completed on February 29, 2008. Buzzard leased its generating facility from Scrubgrass Generating Company, L.P. The Scrubgrass plant, referred to as Scrubgrass, located on a 600-acre site in Venango County, Pennsylvania, is an approximate 83 megawatt waste coal-fired electric generating station. We decided to seek the disposition of Buzzard s leasehold interest in the Scrubgrass facility to allow management to focus its attention and resources on the development and growth of Microgy. As a result of Buzzard s disposition of its leasehold interest, we are now consolidating all segments of continuing operations for financial reporting purposes and reporting the results of Buzzard as discontinued operations .

The assets and liabilities of Buzzard have been accounted for as discontinued operations for sale for all periods presented in accordance with the criterion established in Accounting Standard Codification ( ASC ) 360-10-5-35 *Impairment or Disposal of Long Lived Assets*. We no longer have a continuing involvement with the Buzzard business since we disposed of the leasehold interest in the Scrubgrass facility and do not continue any revenue or cost-generating activities related to Buzzard. As required by the ASC, the accompanying consolidated balance sheets and statements of operations report the assets, liabilities and operations of Buzzard as discontinued operations.

#### **GOING CONCERN**

The company s consolidated financial statements have been prepared on a going concern basis, which contemplates continuity of operations, realization of assets and satisfaction of liabilities in the ordinary course of business. As a predominately development-oriented company, we have experienced substantial losses since the year ended December 31, 2002. For the year ended December 31, 2009, we incurred a net loss applicable to common shareholders of \$37,447,000 and used cash of \$8,190,000 in operating activities. We anticipate incurring losses at least through 2012 as we continue the construction of our portfolio of announced projects subject to the availability of funding. As of December 31, 2009, we had an accumulated deficit of \$105,122,000, and our unrestricted cash and cash equivalents amounted to \$663,000. Currently, our facility at Huckabay Ridge, Texas will not generate sufficient positive cash flow, by itself, to meet our short-term and long-term corporate and project-related capital requirements. In addition we were unable to make the January 1, 2010 interest payment of \$560,000 on our 14% convertible notes and did not make either the July 1, 2009 or January 1, 2010 dividend payments on our 9% Series A preferred stock which total \$1,334,000. Our subsidiary, Microgy Holdings, LLC, referred to as Microgy Holdings, is in default on outstanding tax-exempt bonds and the bondholders have accelerated demand for payment on these obligations. Microgy Holdings does not have cash to pay these obligations. Among the options available to the bondholders is to seek to foreclose on the Huckabay Ridge facility and the other Texas and California projects included in their collateral. To date bondholders have not yet attempted to do so. Our subsidiary Microgy Grand Island, LLC, referred to as Microgy Grand Island is in default on outstanding tax-exempt bonds but the bondholders have not given notice of default or taken any action to accelerated demand for payment on these obligations.

In the past, we have been able to obtain outside financing to fund our losses and meet our capital requirements with the anticipation that once our portfolio of projects are complete and operational, they would

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contribute to future liquidity needs. While we have implemented steps to reduce our general and administrative expenses and Huckabay Ridge is generating positive operating cash flow, we will need to raise substantial funds during the first half of 2010 in order to fund ongoing general and administrative expenses as well as debt service and dividend requirements. We are currently actively seeking additional sources of capital to meet these financing needs. To that end, on January 29, 2010 we completed a transaction whereby, through the establishment of a joint venture, we expect to receive \$1,500,000 in the first quarter of 2010. This transaction is explained in greater detail in Note P Subsequent Events. We continue to work with our independent financial advisors to identify and explore various opportunities to raise the capital we require as well as other strategic alternatives. However, we cannot assure you that we will be able to raise sufficient capital on acceptable terms, or at all. The level of funds we are able to raise, if any, will determine the level of development and construction activity that we can pursue and whether we will be able to continue as a going concern.

The accompanying consolidated financial statements have been prepared assuming that we will continue as a going concern. The uncertainties described in the preceding paragraph raise substantial doubt at December 31, 2009 about our ability to continue as a going concern. The accompanying consolidated financial statements do not include any adjustments relating to the recoverability and classification of the carrying amount of recorded assets or to the amount and classification of liabilities that might result should we be unable to continue as a going concern.

#### CRITICAL ACCOUNTING POLICIES

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements, the reported amounts of revenues and expenses during the reporting period, and the disclosure of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates. Management believes the following critical accounting policies, among others discussed in Note D to our consolidated annual financial statements appearing in this report, involve the more significant judgments and estimates that were used in the preparation of our consolidated financial statements.

#### Accounts Receivable

Accounts receivable is presented on the consolidated balance sheets net of estimated uncollectible amounts. The Company records an allowance for estimated uncollectible accounts in an amount approximating anticipated losses. Individual collectible accounts are written off against the allowance when collection of the individual accounts appears doubtful.

#### Notes Receivable

In 2005, we completed construction of the digesters at Five Star Dairy and Wild Rose Dairy and in 2006, we completed construction of the digester at the Norswiss Dairy, collectively Dairyland sites . The sales price for each digester was \$1,037,000 and is to be paid out of the cash flow from the sale of gas and greenhouse gas sequestration credits generated under the applicable biogas supply agreement between the digester owner and Dairyland sites, which extends through 11 years after the sale for the facility to which it relates. We will be paid up to a maximum of \$3,111,000 in the aggregate, plus simple interest at 5% per annum, which is evidenced by three separate notes from each of the digester owners of \$1,037,000 each. In 2009 and 2008, the company received payments of \$18,000 and \$219,000, respectively, from the sale of carbon sequestration credits which were applied to these notes. As of December 31, 2009 after giving effect to the \$750,000 bad debt allowance relating to these notes established in 2005, the notes have an aggregate remaining balance of \$1,515,000 which we expect to collect in its entirety. We will continue to evaluate the estimated operating cash flows from these digesters that support the ability to realize these notes and make further adjustments, if required. As described in Note P Subsequent Events, we contributed certain rights related to the collection of these notes, among other assets, to the joint venture we entered into in January 2010.

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#### Intangible Assets

Under the provisions of ASC 350 Goodwill and Other Intangibles

goodwill and indefinite-lived intangible assets are tested for impairment at least annually;

goodwill and indefinite-lived intangible assets are no longer to be amortized to income; and

the amortization period of intangible assets with finite lives can be no longer than forty years.

The Company acquired Microgy, Inc. in 1999. This acquisition resulted in an initial allocation of \$4,913,000 to goodwill. The impairment evaluation for goodwill had been conducted at least annually, or more frequently, if events or changes in circumstances indicated that an asset might be impaired. The evaluation was performed using a two-step process. The first step compares the book value of the Company s reporting unit to its estimated fair value. The second step of the goodwill impairment test, which is only required when the net book value of the reporting unit exceeds the fair value, compares the implied fair value of goodwill to its book value to determine if an impairment is required. The Company estimates the fair values of its reporting unit using the income approach which measures the value of an intangible asset based on the expected stream of monetary benefits attributable to it over its remaining useful life.

The Company annually performed tests to determine the appropriate value of goodwill. The results of these tests in 2008 resulted in the Company's determination that the entire balance of \$4,913,000 was impaired, due primarily to the current market price of its common stock relative to its book value, projections of future cash flows and other factors. Previously, the market price of the Company's common stock and, consequently, its market capitalization were relatively high compared to the book value per share of its common stock. However, since 2008 the Company's market value has been substantially below its book value, due principally to the current market price of its common stock. As a result, accounting requirements required the Company to determine whether there is enough market value after covering other net assets on a book basis to cover any of its goodwill. The Company determined that market value was insufficient to cover goodwill, and determined that the write-off was required. The write-off of goodwill is not a reflection on the economics of the Company's projects, which the Company continues to stand behind, but is simply the result of the application of accounting requirements associated with goodwill impairment.

#### Impairment of Long- Lived Asset

In accordance with ASC 360-10 *Property, Plant and Equipment*, the Company evaluates long-lived assets such as construction in progress, property and equipment and purchased intangible assets with finite lives subject to amortization for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be fully recoverable or that the useful lives of those assets are no longer appropriate. Each impairment test is based on a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated undiscounted future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the net realizable value of the asset. There were no such impairment charges recorded during the years ended December 31, 2008 and 2007. However, as described above, we did record an impairment of goodwill in 2008. For the year ended December 31, 2009 we determined certain long-lived assets were impaired and wrote down the value of these assets to their current net realizable value. See Note N- Impairment of Assets for a discussion of these write-downs. It should be noted that these impairments were recorded in accordance with the applicable accounting rules and does not mean we do not intend to complete the projects. We still retain valid permits at these sites and other items of value to us, such as relationships with local farms and preliminary designs and plans, which we may utilize when, and if, we are able to obtain financing for these projects and proceed with their development.

#### Revenue Recognition

We record revenues from gas sales when the gas is produced and tipping fees when we receive the material and invoice the customer. We record revenues for operation and maintenance of the facilities at the Dairyland

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Power Cooperative sites which appear as revenues on our statements of operations. Operations and maintenance revenues and natural gas revenues are recorded as services are provided or gas is produced on a monthly basis. Revenue from the sale of greenhouse gas sequestration credits is only recognized after the carbon credits have been authenticated by an independent third party, registered on the Chicago Climate Exchange and invoiced to the customer.

#### Stock-Based Compensation Expense

The employee stock-based compensation expense recognized and information presented in the required disclosure was determined using the Black-Scholes option valuation model. Option valuation models require the input of subjective assumptions, and these assumptions can vary over time.

Employee stock-based compensation expense recognized in 2009, 2008 and 2007 was calculated based on awards ultimately expected to vest and has been reduced for estimated forfeitures. The forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. A forfeiture rate of 0% for directors, 0% to 25% for executive officers and 0% to 16% for other employees is applied to the stock-based compensation expense, determined through historical experience of employee stock-based awards. We base our determination of expected volatility primarily on our assessment of the historical volatility of our common stock. During the years ended December 31, 2009, 2008 and 2007, we based our determination of the expected term using a combination of the simplified method and our assessment of the historical post vesting termination activity depending on the amount of historical information available.

#### Accounting for Income Taxes

*Income Taxes*: We account for income taxes in accordance with ASC 740 *Income Taxes*. As required by this ASC, deferred tax assets and liabilities are determined based on differences between the financial reporting and tax reporting bases of assets and liabilities and are measured by applying the enacted tax rates and laws to taxable years in which the differences are expected to reverse. We recognize a deferred tax asset for the future tax benefits when it is more likely than not that the tax benefits will be realized and reduce the deferred tax asset with a valuation reserve when it is more likely than not that some portion of the tax benefits will not be realized.

#### **Results of Operations**

#### **Continuing and Discontinued Operations**

#### Comparison of the Years ended December 31, 2009 and 2008

Overview. For the year ended December 31, 2009, we had a net loss applicable to common shareholders of \$37,447,000 or loss per common share of \$2.40, compared to a net loss applicable to common shareholders of \$17,333,000 or loss per common share of \$1.11 for the year ended December 31, 2008. This increase in net loss reflects changes in results from continuing operations and discontinued operations as follows:

Net loss from continuing operations was \$36,112,000 for the year ended December 31, 2009 as compared to \$22,996,000 for the year ended December 31, 2008. The results for 2009 included a non-cash non-recurring charge for the impairment of assets of \$26,070,000 as described below. The results for 2008 include a non-cash charge for the impairment of assets of \$4,913,000.

In 2008, we disposed of our discontinued operations. The results for 2008 include two months of results before the disposal of the operation. The results for 2008 also include a gain on disposal of discontinued operations of \$8,000,000. There was no comparable item in 2009.

Without the non-cash charges for the impairment of assets in 2009 and 2008, the net loss from continuing operations would have declined from \$18,083,000 in 2008 to \$10,042,000 in 2009.

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Individual line items on the statements of operations are discussed below.

*Revenues*. Revenues for the year ended December 31, 2009 increased to \$4,711,000 from \$2,905,000 for the year ended December 31, 2008, or an increase of 62%. The increase is attributable primarily to revenues from the Huckabay Ridge facility which began operations in February 2008 and had revenues of \$3,764,000 in 2009 and \$1,723,000 for 2008. In 2008, from September through December, Huckabay Ridge did not have production because the facility was taken out of service for certain repairs, equipment upgrades and operating improvements.

Operations and maintenance expense. For the year ended December 31, 2009, operations and maintenance expense was \$3,607,000, a decrease of \$3,511,000 from operations and maintenance expense incurred for the year ended December 31, 2008. The decrease in operations and maintenance expense, despite higher revenues, was due to the fact that 2008 results include some non-recurring and start-up expenses related to initial operations at Huckabay Ridge. In addition, expenses for 2008 included a charge of \$562,000 related to the write-off of deposits with suppliers based on our decision to terminate certain tank orders. Operations and maintenance expense also declined in 2009 because in 2008 we had the costs related to two insurance events and we received and recorded the insurance proceeds in 2009.

Impairment of assets. In 2009, we review our long lived assets for impairment whenever changes in circumstances indicate their carrying value may not be recoverable. Due to the loss of debt funding on certain projects and lack of liquidity, we recorded an impairment related to these projects and reduced the carrying value of these assets to their net realizable value. We also wrote-off the deferred financing costs related to these debt obligations. The impairment of assets included a write-down of \$21,434,000 on six separate projects and write-off of \$4,636,000 in deferred financing costs. Since it is difficult to provide the necessary documentation of a development project sales value to third parties, we determined that, except in one instance where we have a separate land value, the assets should be written down to \$0.

In 2008, we determined that the entire \$4,913,000 balance of our goodwill resulting from the acquisition of Microgy was impaired. This impairment is a non-cash, non-recurring charge. We annually performed tests to determine the appropriate value of goodwill. The results of these tests in 2008 resulted our determination that the entire balance of \$4,913,000 was impaired, due primarily to the current stock price of our common stock relative its book value, projections of future cash flow and other factors. Previously, the market price of our common stock and consequently our market capitalization were relatively high compared to the book value of our common stock. However, in 2008 our market value fell below our book value due principally to the market price of our common stock. As a result, accounting standards required us to determine whether there is enough market value after covering other net assets on a book basis to cover any of the goodwill. We determined that market value was insufficient to cover goodwill and determined that the write-off was required.

General and administrative expense. General and administrative expense decreased by \$5,595,000 to \$6,408,000 for the year ended December 31, 2009 from \$12,003,000 for the year ended December 31, 2008. The primary reason for the decline in general and administrative expense was the reduction in payroll expenses and related costs due to reductions in force. Non-cash compensation expense from the issuance of options and stock appreciation rights also declined significantly.

Depreciation and amortization expense. Depreciation and amortization expense increased to \$1,541,000 for the year ended December 31, 2009, as compared to \$1,359,000 for the year ended December 31, 2008. The increase in depreciation and amortization expense was due to increased depreciation of the Huckabay Ridge facility, which began commercial operations in February 2008 and added capital improvements in 2009.

*Operating loss*. As a result of the changes described above, our operating loss increased to \$32,915,000 for the year ended December 31, 2009, as compared to \$22,488,000 for the year ended December 31, 2008. Without the increase in the non-cash charge for impairments of assets in 2009, the operating loss would have declined by \$10,730,000.

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*Interest income*. Interest income for the year ended December 31, 2009 was \$42,000, as compared to \$487,000 for the year ended December 31, 2008. Interest income declined due to both higher invested balances in 2008 as compared to 2009 and lower interest rates on invested assets in 2009.

Interest expense. Interest expense increased to \$3,344,000 in 2009 from \$969,000 in 2008. The increase was due to several factors. In 2009, the Company issued \$8,000,000 aggregate principal amount of its 14% convertible notes and incurred of \$816,000 of interest expense on these notes. In April 2009, we also stopped capitalizing interest on the Swift project and recorded \$368,000 of interest expense during 2009 in respect of the tax-exempt bond financing relating to this facility. We also expensed some of the interest incurred on our Texas and California tax-exempt bond financings to the extent that they were redeemed or repurchased in 2009. In 2008, all of the interest costs on the California bonds and interest on \$45,000,000 of the Texas bonds was capitalized.

Other income (expense). In 2009, we recorded income of \$161,000 from the adjustment of the valuation of an outstanding warrant. This income was partially offset from the loss on the sublease of our Golden, Colorado facility of \$28,000. We had no items of other income or expense in 2008.

*Income tax expense.* Because we are not assured of realizing the benefits of operating losses for tax purposes we did not record an income tax benefit for losses incurred during the years ended December 31, 2009 and 2008. Income tax expense for 2009 and 2008 represents estimated payments for state income taxes.

Loss from discontinued operations, net of taxes. The results for 2008, a loss of \$1,011,000, consist of the operating loss of Buzzard for the first two months of 2008 prior to the disposition of the Scrubgrass facility on February 29, 2008. We had no discontinued operations in 2009.

Gain on disposal of discontinued operations. We disposed of Buzzard s interest in the Scrubgrass facility on February 29, 2008 and recognized a one-time gain of \$8,000,000. With the exception of a cash payment of \$375,000, the gain was non-cash in nature and consisted principally of recognition of a previously deferred gain in the amount of \$2,570,000, forgiveness of indebtedness in the amount of \$3,456,000 and elimination of other obligations in the amount of \$1,630,000. There was no tax provision provided on the disposition due to the utilization of net operating loss carryforwards at the federal and state levels which offset any potential tax liability with respect to the gain on disposal.

The net result of the loss from discontinued operations and gain on disposal of discontinued operations for the year ended December 31, 2008 was net income from discontinued operations of \$6,989,000. We had no discontinued operations in 2009.

#### Comparison of the Years ended December 31, 2008 and 2007

Overview. For the year ended December 31, 2008 we had a net loss applicable to common shareholders of \$17,333,000 or loss per common share of \$1.11, compared to a net loss applicable to common shareholders of \$18,860,000 or loss per common share of \$1.66 for the year ended December 31, 2007. This reduction in net loss reflects changes in continuing operations and discontinued operations as follows:

Net loss from continuing operations was \$22,996,000 for the year ended December 31, 2008 as compared to \$11,161,000 for the year ended December 31, 2007. The results for 2008 included a non-cash non-recurring charge for the impairment of goodwill of \$4,913,000.

Net loss from discontinued operations was \$1,011,000 for the year ended December 31, 2008 as compared to \$6,196,000 for the year ended December 31, 2007. In 2008, discontinued operations includes two months of results before the operation was disposed of as compared to twelve months of results for 2007.

The results for 2008 include a gain on disposal of discontinued operations of \$8,000,000. There was no comparable item in 2007.

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Individual line items on the statements of operations are discussed below.

Revenues. Revenues for the year ended December 31, 2008 increased to \$2,905,000 from \$1,175,000 for the year ended December 31, 2007 or an increase of 147%. The increase is attributable primarily to revenues from the Huckabay Ridge facility which began operations in February 2008 and had revenues of \$1,723,000 for 2008. The facility was in service from February through August and then resumed production in December. The facility was taken out of service for certain repairs, equipment upgrades and operating improvements.

Operations and maintenance expense. For the year ended December 31, 2008 operations and maintenance expense was \$7,118,000, which was an increase of \$6,176,000 over operations and maintenance expense incurred for the year ended December 31, 2007. The increase was due to operations and maintenance expense of \$5,973,000 at Huckabay Ridge which began operation in February 2008 and therefore had no operations and maintenance expense in 2007. These expenses include some non-recurring and start-up expenses related to initial operations at Huckabay Ridge. In addition expenses included a charge of \$562,000 related to the write-off of deposits with suppliers based on our decision to terminate tank orders.

Impairment of goodwill. In 2008, as discussed above, we determined that our goodwill resulting from the acquisition of Microgy was impaired and the entire balance of \$4,913,000 was impaired. This impairment is a non-cash, non recurring charge. We annually performed tests to determine the appropriate value of goodwill. The results of these tests in 2008 resulted in our determination that the entire balance of \$4,913,000 was impaired, due primarily to the price of our common stock relative to its book value, projections of future cash flow and other factors. Previously, the market price of our common stock and consequently our market capitalization were relatively high compared to the book value of our common stock. However, in 2008 our market value was substantially below our book value due principally to the current market price of our common stock. As a result, we were required us to determine whether there is enough market value, after covering other net assets on a book basis, to cover any of the goodwill. We determined that market value was insufficient to cover goodwill and determined that the write-off was required. This calculation is not a reflection of the economics of the projects we are undertaking, which we continue to stand behind, but is simply the application of accounting requirements associated with goodwill.

General and administrative expense. General and administrative expense decreased by \$441,000 to \$12,003,000 for the year ended December 31, 2008 from \$12,444,000 for the year ended December 31, 2007. The primary reasons for the decline in general and administrative expense were reductions in payroll expense and non-cash compensation expense from the issuance of options and stock appreciation rights. These reductions in expenses were partially offset by higher expenses for insurance and professional fees.

Depreciation and amortization expense. Depreciation and amortization expense increased to \$1,359,000 for the year ended December 31, 2008 as compared to \$304,000 for the year ended December 31, 2007. The increase in depreciation and amortization expense was principally due to the fact that 2008 included eleven months of depreciation of the Huckabay Ridge facility, which began commercial operations in February 2008.

*Operating loss.* As a result of the changes described above, our operating loss increased to \$22,488,000 for the year ended December 31, 2008 as compared to \$12,515,000 for the year ended December 31, 2007.

*Interest income*. Interest income for the year ended December 31, 2008 was \$487,000 as compared to \$783,000 for the year ended December 31, 2007. Interest income declined due to both higher invested balances in 2007 as compared to 2008 and lower interest rates on invested assets in 2008.

*Interest expense.* Interest expense increased to \$969,000 in 2008 from \$12,000 in 2007. The increase was due to the fact that we ceased capitalizing the interest associated with the Huckabay Ridge facility when construction was completed in February 2008. The interest expense related to the portion of the bonds allocated to finance the Huckabay Ridge facility is no longer capitalized but is recorded as interest expense. The amount of this interest expense is \$87,500 a month.

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Other income (expense). In 2007, income of \$584,000 was the one-time recognition of the reversal of a reserve resulting from the expiration of the statute of limitations on a contingent obligation related to the sale of a project in 2001.

*Income tax expense.* Because we are not assured of realizing the benefits of operating losses for tax purposes we did not record an income tax benefit for losses incurred during the years ended December 31, 2008 and 2007.

Loss from discontinued operations, net of taxes. The results for 2008, a loss of \$1,011,000, consist of the operating loss of Buzzard for the first two months of 2008 prior to the disposition of the Scrubgrass facility on February 29, 2008. The 2007 loss of \$6,196,000 reflects the results of Buzzard for the twelve months ended December 31, 2007.

Gain on disposal of discontinued operations. We disposed of Buzzard s interest in the Scrubgrass facility on February 29, 2008 and recognized a one-time gain of \$8,000,000. With the exception of a cash payment of \$375,000 the gain was non-cash in nature and consisted principally of recognition of a previously deferred gain in the amount of \$2,570,000, forgiveness of indebtedness in the amount of \$3,456,000 and elimination of other obligations in the amount of \$1,630,000. There was no tax provision provided on the disposition because we believe that we have sufficient net operating loss carryforwards at the federal and state levels to offset any potential tax liability with respect to the gain on disposal.

The net result of loss from discontinued operations and gain on disposal of discontinued operations for the year ended December 31, 2008 was net income of \$6,989,000 compared to a net loss of \$6,196,000 for the year ended December 31, 2007.

#### **FUTURE OPERATING RESULTS**

We expect to experience significant fluctuations in future operating results that may be caused by many factors, including, among other things, the progress of Microgy s business plan, the effects of competition, market acceptance of our products, the mix of our products and services sold, demand for our products or the timing of customer acceptance of our products, changes in the level of our operating expenses, general economic conditions and the factors set forth in Part I, Item 1A Risk Factors appearing elsewhere in this report. In addition, we face the uncertainty of the outcome of negotiations related to those debt instruments on which we have defaulted and our lack of liquidity if we cannot obtain additional financing. Due to these and other factors, our annual revenues and operating results are difficult to forecast accurately.

### LIQUIDITY AND CAPITAL RESOURCES

#### 2009

#### Overview

As a predominately development-oriented company, we have experienced substantial losses since the year ended December 31, 2002. In the past, we have obtained outside funding to fund our losses and meet our capital requirements. At December 31, 2008 we determined that unless we obtained substantial outside sources of capital in 2009, we would not be able to fund our ongoing general and administrative requirements, debt service and dividend requirements. During 2009, we did raise sufficient capital to meet some of our requirements but other obligations remain due and unpaid such as those described in Going Concern above. At December 31, 2009, we have \$663,000 of cash and cash equivalents and will again need substantial outside funding during 2010 to meet our obligations and continue operations.

#### **Operating Activities**

Our cash used in operating activities was \$8,190,000 for the year ended December 31, 2009, compared to cash used in operating activities of \$12,443,000 for the year ended December 31, 2008. We reported a net loss of

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\$36,112,000 during the year ended December 31, 2009. The following adjustments to our cash flows need to be considered in order to reconcile our net loss for 2009 to our net cash used in operating activities:

Impairment of assets In 2009, we recorded impairments for certain assets in construction-in-process and certain deferred financing costs in the amount of \$26,070,000 as described in Note N Impairment of Assets. This impairment is a non-cash charge and is added back to funds provided from operations.

Depreciation and amortization During the year ended December 31, 2009, we recognized depreciation and amortization for equipment of \$1,355,000 and licensed technology rights of \$186,000.

Stock-based compensation Accounting for stock appreciation rights, options and restricted stock grants resulted in non-cash compensation expenses of \$418,000 for the year ended December 31, 2009.

#### **Investing Activities**

Our cash provided by investing activities was \$93,169,000 in the year ended December 31, 2009, as compared to cash used for investing activities of \$73,345,000 in the year ended December 31, 2008. In 2009 the cash provided by investing activities was primarily from a reduction in our restricted cash balances. These funds were primarily used to repurchase or redeem outstanding debt and related interest.

Restricted cash We are required to hold cash associated with our tax-exempt bond financing with a third party disbursement agent. On December 31, 2009, the disbursement agent was holding a balance of \$1,792,000 in bond proceeds, compared to \$104,577,000 on December 31, 2008. The decrease in restricted cash is attributable primarily to the restricted cash funds used for repayment and redemption of outstanding Texas and California tax-exempt bonds, as well as the sweeping of bond accounts in connection with the acceleration of the bonds following default. These assets are invested in short-term, high quality debt instruments.

Construction of projects Expenditures on construction of our projects, including capitalized interest, was \$9,481,000 for the year ended December 31, 2009, compared to \$16,906,000 for the year ended December 31, 2008.

*Property, plant and equipment* Property, plant and equipment expenditures were \$266,000, for the year ended December 31, 2009, compared to expenditures of \$377,000 for the year ended December 31, 2008.

#### Financing Activities

Our cash used for financing activities was \$87,474,000 in the year ended December 31, 2009, compared to cash provided by financing activities of \$64,113,000 in the year ended December 31, 2008. We offer the following information concerning the financing activities for our business:

*Proceeds from long-term debt* In 2009, we issued \$8,000,000 in 14% convertible notes. We received \$5,000,000 in cash from these notes and \$3,000,000 of the notes was used for the payment of license fees.

Dividend payments obligations We paid dividends of \$667,000 to preferred stockholders during the year ended December 31, 2009.

Payment on long-term debts In November 2009, Microgy Holdings repaid or redeemed \$46,220,000 of outstanding principal amount of the Texas and California tax-exempt bond obligations. In December 2009, an additional \$44,761,000 was repaid in connection with the acceleration of the bonds following default.

#### 2008

#### **Operating Activities**

Our cash used in operating activities was \$13,679,000 in the year ended December 31, 2008, compared to cash used in operating activities of \$8,117,000 for the year ended December 31, 2007. We reported a net loss of \$16,007,000 during the year ended December 31, 2008. The following adjustments, which did not impact our cash flows, need to be considered in order to reconcile our net loss for 2008 to our net cash used in operating activities:

Depreciation and amortization During the year ended December 31, 2008, we recognized depreciation and amortization for licensed technology rights of \$186,000, lease rights of \$20,000 and property plant and equipment of \$1,153,000.

Stock-based compensation The accounting for options, stock appreciation rights, warrants and restricted stock grants resulted in non-cash compensation expenses of \$1,951,000 for the year ended December 31, 2008.

We also offer the following information regarding changes in operating assets and liabilities that most notably impacted our cash position during 2008:

*Receivables* Total receivables increased by \$15,783,000. The increase is primarily attributable to increased receivables at Buzzard due to increased power generation revenues in the fourth quarter of 2008 compared to power generation revenues in the fourth quarter of 2007.

#### **Investing Activities**

Our cash used for investing activities was \$73,345,000 in the year ended December 31, 2008, as compared to \$5,764,000 in the year ended December 31, 2007. Cash used for investing activities for the year ended December 31, 2008 included a \$56,641,000 increase in restricted cash as a result of the 2008 bond financings. Our investing activities were concentrated primarily in the following areas:

Restricted cash We are required to hold cash associated with our tax-exempt bond financing with a third party disbursement agent. On December 31, 2008, the disbursement agent was holding a balance of \$104,577,000 in bond proceeds, compared to \$45,785,000 on December 31, 2007. We also held \$553,000 in a restricted cash account to fund our potential asset retirement obligation at Huckabay.

Construction on projects Expenditures on our facilities were \$16,906,000 for the twelve months ended December 31, 2008 compared to \$12,388,000 for the twelve months ended December 31, 2007.

*Property, plant and equipment* Property, plant and equipment expenditures were \$377,000 for the year ended December 31, 2008, compared to expenditures of \$560,000 for the year ended December 31, 2007.

#### Financing Activities

Our cash provided by financing activities was \$64,113,000 for the year ended December 31, 2008, compared to cash provided for financing activities of \$26,157,000 in the year ended December 31, 2007. We offer the following information concerning the financing activities for our business:

Dividend payments obligations We paid dividends of \$1,326,000 to preferred stockholders during the year ended December 31, 2008.

Public Offerings of Common Stock On October 3, 2007, the Company raised \$26.6 million through the sale of 5,400,000 shares of common stock.

*Proceeds from Bond Financing* In 2008, Microgy Holdings, LLC, our wholly-owned subsidiary, closed \$69,425,000 in tax-exempt bond financings. The bonds were issued at par and pay a coupon of 9%. Microgy Grand Island, Inc., our wholly-owned subsidiary closed \$7,000,000 in tax-exempt bonds that were issued at par and pay a coupon of 7%.

Exercise of Stock Options and Warrants We received \$2,952,000 of gross proceeds from the exercise of stock options and warrants in the year ended December 31, 2007.

#### Long-Term Contractual Liabilities & Commitments

The following table shows our long-term contractual liabilities and commitments.

<b>Commitments of Continuing Operations</b>	2010	2011	2012	2013	2014	Thereafter	Total
Operating Leases(1)	\$ 366,972	\$ 328,800	\$ 126,228	\$	\$	\$	\$ 822,000
Microgy Commitments(2)	3,000,000						3,000,000
14% Convertible Notes(3)	8,000,000						8,000,000
Tax Exempt Bonds(4)	38,444,409						38,444,409
Security Deposit(5)	100,000	100,000	100,000	100,000			400,000
Vehicle Loans(6)	19,814	1,476					21,290
TOTAL	\$ 49,931,195	\$ 430,276	\$ 226,228	\$ 100,000	\$	\$	\$ 50,687,699

- (1) We are obligated under various non-cancelable operating leases for office space. Rent expense for these operating leases was \$272,513, \$371,637, and \$424,765, in 2009, 2008 and 2007, respectively.
- (2) These commitments relate to various purchase agreements, and include amounts expected to be claimed by SouthTex Treaters for gas treatment equipment, in connection with our Microgy facilities.
- (3) Although these notes are not due until January 1, 2014, EPC is in default on this obligation and either the trustee or 25% of the bond holders can demand immediate payment.
- (4) Microgy Holdings is in default on the Texas and California bonds and bondholders have accelerated demand for payment of the principal of the remaining bonds in the amount of \$31,444,409. Microgy Grand Island is in default on the \$7,000,000 of Nebraska bonds but neither the bondholders nor the trustee has demanded accelerated payment.
- (5) In December 2008, Microgy signed a contract with a customer that required security deposits to protect against failure to deliver product in certain instances.
- (6) We are obligated under various loans for vehicles.

The following table provides details regarding the current portion of our long-term debt obligations as of December 31, 2009. At December 31, 2008 none of our debt obligations were due within one year:

	December 31, 2009
Current portion of long-term debt	
California loan related to tax-exempt bonds	\$ 8,355,699

Texas loan related to tax-exempt bonds	23,088,710
Nebraska loan related to tax-exempt bonds	7,000,000
14% convertible notes	8,000,000
Vehicle loans	19,814
TOTAL	\$ 46,464,223

The following table provides details regarding our long-term contractual obligations as of December 31, 2009 and 2008:

	Dec	ember 31, 2009	Dec	ember 31, 2008
Long-term debt				
Vehicle loans	\$	1,432	\$	50,023
California loan related to tax-exempt bonds			6	2,425,000
Texas loan related to tax-exempt bonds			6	0,000,000
Nebraska financing lease related to tax-exempt bonds				7,000,000
TOTAL	\$	1.432	\$ 12	9,475,023

*Notes Receivable from Officers and Directors* We have outstanding notes receivable from former and current officers and directors for shares purchased in connection with stock option plans of \$638,219 as of December 31, 2009 and December 31, 2008. These notes, partially secured by the underlying shares of stock purchased thereby, are payable upon demand and bear interest at a floating rate which is payable monthly. In accordance with company policy and applicable law, we no longer make loans to our officers or directors.

Microgy Holdings Debt Obligations In November 2006, Microgy Holdings closed a \$60,000,000 tax-exempt bond financing through the Gulf Coast Industrial Development Authority of Texas. These bonds were issued at par and pay a coupon of 7%. The proceeds of the bond offering provided debt financing for our Huckabay Ridge renewable natural gas facilities in Texas. To date we have used \$1,200,000 to fund costs of issuance, \$15,000,000 to fund construction of our Huckabay Ridge facility, and \$2,492,000 to fund construction activities at the Rio Leche and Cnossen projects. In September 2008, Microgy Holdings closed a \$62,425,000 tax-exempt bond financing through the California Statewide Communities Development Authority. These bonds were also issued at par and pay a coupon of 9%. To date, we have used \$1,249,000 to fund costs of issuance. In November of 2009, Microgy Holdings entered into a demand purchase agreement with the bondholders that resulted in redemption or repurchase of \$15,005,000 of the Texas bonds and \$31,215,000 of the California bonds plus accrued interest. Microgy Holdings failed to make the required semi-annual interest payments due on the Texas and California bonds as of December 1, 2009 from general corporate funds. This failure was deemed to be an event of default by the bondholders and the bondholders accelerated payment of interest and principal of these bonds on December 23, 2009. As a result, the bondholders applied existing restricted cash funds to reduce the amount of obligations outstanding to their current balances at December 31, 2009. The obligations of Microgy Holdings under the Texas and California bond financings are non-recourse to Environmental Power although Environmental Power is required to provide at least 20% of the construction cost of the facility, as well as to cover any cost overruns in construction and to fund operations and maintenance prior to achievement of completion. The trustee or bondholders holding 25% of the principal amount of the bonds can seek to begin foreclosure proceedings on the assets but neither has done so to date.

Microgy Grand Island, LLC Debt Obligation In July 2008, Microgy Grand Island LLC, our wholly-owned subsidiary, closed a \$7,000,000 tax-exempt bond financing through the City of Grand Island, Nebraska. These bonds were issued at par and pay a coupon of 7%. The proceeds of the bond offering provided debt financing for the renewable gas facility under construction at Grand Island, Nebraska. These bonds carry certain restrictions and covenants, including reporting requirements and restrictions on the use of the funds. To date, we have used \$140,000 to fund costs of issuance and \$5,909,000 of the proceeds to fund construction of our Grand Island facility. The obligations of Microgy Grand Island LLC under the Nebraska bond financing are non-recourse to Environmental Power, although Environmental Power is required to provide at least 20% of the construction cost of the facility, as well as to cover any cost overruns in construction and to fund operations and maintenance prior to achievement of completion. On December 1, 2009, the required interest payment of \$245,000 was made from the debt service reserve fund of the bonds. The payment of interest from the debt service reserve fund is an event of default which has not been cured. The trustee or bondholders holding 25% of the principal amount of the bonds can accelerate payment of these bonds and begin foreclosure proceedings on the assets but neither has done so to date.

#### 2010 Outlook

#### **Operations**

The following forward-looking information concerning our anticipated results of operations for the full year 2010 is being compared to our historical results of operations for 2009.

Because we contributed our interest in the Wisconsin facilities to a joint venture in January 2010, we will not be reporting the revenues and operations and maintenance expenses of the Wisconsin facilities in our financial statements after January 2010. We will account for Wisconsin operations on the equity method and include 30% of the net revenues in our statement of operations.

If we are able to implement combined heat and power improvements at Huckabay Ridge, we anticipate a substantial increase in revenue.

At Huckabay Ridge, due to outages and downtime to complete comprehensive upgrades, the facility did not produce at maximum capacity in 2009. We expect our Huckabay Ridge facility to be capable of achieving an operating rate equal to its annualized production target of 575,000 MMbtus per year. In addition, if we are able to obtain financing to implement certain CHP improvements we expect the annual production of RNG® we can sell to increase to an annual rate of 782,000 MMbtus in 2010.

We expect our operation and maintenance expenses at Huckabay Ridge to increase during 2010 to reflect the normal commercial operations of the Huckabay Ridge facility for a full year of production. In addition, during 2009, operations and maintenance costs at Huckabay Ridge were reduced by the receipt of certain insurance proceeds related to claims for incidents that occurred in 2008.

In 2009, we completed a number of actions to reduce or eliminate certain general and administrative costs. General and administrative expenses in 2010 are expected to be consistent with 2009 amounts.

#### Projects in Development

Other Texas Projects. The Cnossen and Rio Leche projects are in the engineering phase and some initial site work has been completed. We have made our initial equity contributions for these projects and expect to proceed with foundation construction and additional site work when we obtain the required capital. Anticipated completion of construction is approximately one year after we begin full construction.

California Projects. As previously reported, our California projects have all requisite water and air permits. Our ability to continue development of these projects will depend on whether we can obtain the necessary equity and debt funding.

JBS Swift Grand Island. Construction on the biogas facility located at the JBS Swift & Co. beef processing plant in Grand Island, Nebraska, began in 2008 and has been funded to date from the \$7,000,000 in bond financing. We have, however, suspended construction pending financing commitments for remaining capital requirements. In addition we are currently in default on the \$7,000,000 in tax-exempt bonds previously issued.

The suspension of construction has resulted in a delay in meeting the scheduled date for commencement of biogas deliveries under the terms of the Biogas Purchase and Sale Agreement between Microgy Grand Island, LLC and JBS Swift. Microgy Grand Island has informed JBS Swift that Microgy Grand Island intends to resume construction once remaining financing needs are secured and since February 2009 has, on a reservation-of-rights basis, made certain payments to JBS Swift to cover its claim for liquidated damages. We believe that such damages constitute the sole remedy under the biogas agreement for delay and to date JBS Swift has not disputed our view.

#### Cash Flow Outlook

During early 2010, we expect to fund our business activities principally from available cash balances, raising additional funds through debt and/or equity financings or other financing or strategic transactions by Environmental Power, Microgy or their affiliates and project-specific financing, to the extent available. To that end on January 29, 2010 Microgy, Inc. formed a joint development company called HMI Energy, LLC, referred to as HMI, with Homeland Renewable Energy Inc, referred to as HRE. Under the terms of the agreements relating to HMI, Microgy contributed certain assets related to the Bar 20 California project and Weld County Colorado project, rights to up to five additional future projects, net revenues and rights and obligations relating to Microgy s existing Wisconsin projects, and the right to receipts from the sale of carbon sequestration credits from the Wisconsin and other projects not pledged as collateral for the Texas and California bonds. In exchange, Microgy will receive \$1,500,000 from HRE and a 30% interest in HMI. The other 70% interest in HMI is held by HRE.

The requirement for additional financing will be in direct proportion to the number of projects on which we begin construction, as well as our construction schedule. In addition, during 2010 we will need to resolve outstanding and unpaid interest on our 14% convertible notes of \$560,000, unpaid preferred dividends of \$1,334,000 and the remaining obligations under the Texas and California tax-exempt bonds, as well as fund significant interest and preferred dividend obligations and general and operating expenses. We will require significant additional capital to fund our proposed construction program on its current schedule.

With the closing on the tax-exempt bond issue for the Microgy Grand Island project in July 2008, the initial debt financing of that project is complete. We will, however, need to raise additional money to complete the project, and we will also need to resolve the existing default under the bonds for this project.

On December 31, 2009, our unrestricted cash balance was \$663,000, as compared to \$3,158,000 as of December 31, 2008. In addition, our current restricted cash balances were \$1,792,000 and \$104,577,000, at December 31, 2009 and December 31, 2008, respectively.

Our current cash balance will not be sufficient to fund all of our corporate overhead requirements through the second quarter of 2010. We will require substantial additional financing, at both the project and parent company levels, to continue operations, complete the construction of currently planned facilities, as noted above, including those already under construction, as well as for ongoing debt service, dividend payments and general and administrative expenses. We have engaged independent financial advisors to assist us in exploring corporate and project financing opportunities and other strategic alternatives. We currently have no commitments for any additional financing, and we cannot assure you that such financing will be available on reasonable terms or in a timely fashion, or at all, particularly in the current economic environment, in which capital raising activities are especially challenging. Our inability to obtain adequate financing would likely result in the need to severely curtail or cease our business operations.

#### Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Our most significant risk exposure is changing interest rates which may affect our short term investments generally and would also impact future debt financing costs. The gas production of future projects, to the extent not subject to fixed price off-take agreements or other hedging arrangements, has the potential to expose us to risk associated with fluctuating gas prices. These risks are described in more detail below.

#### Short-term investments

We invest cash balances that are in excess of our normal operating requirements in short term investments generally with maturities of three months or less. Because of the credit quality and short duration of these investments, we do believe our short-term investments are subject to normal market risks associated with high

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quality, low duration money market investments. A portion of our restricted cash balance is invested in highly rated, highly liquid government securities. We believe that those instruments are not subject to material potential near-term losses in future earnings from reasonably possible near-term changes in market rates or prices.

#### Deht

We have financed and expect to continue to finance Microgy s projects with debt financing, including tax-exempt financing, to the extent available. Any such debt financing will be subject to prevailing interest rates.

#### Commodity Price Risk

Since the natural gas we produce is renewable, we can demand and have received pricing at a premium to brown gas. However as Microgy establishes multi-digester projects for the production of RNG®, we could become exposed to market risk with respect to natural gas prices, to the extent that this risk is not mitigated by long-term off-take agreements. Historically, natural gas prices have been volatile, and we expect such volatility to continue. Fluctuations in the commodity price of natural gas may have a materially adverse impact on the profitability of some of our facilities; particularly where we do not have a long-term contract for the sale of the facility s output at a fixed or predictable price. At such time as Microgy s facilities begin to produce commercial quantities of gas for sale as a commodity, we intend to explore various strategies, including hedging transactions and the like, in order to mitigate the associated commodity price risk. In connection with our tax-exempt bond financings, we are required to maintain certain gas price protection arrangements for the gas output of our facilities.

#### Substrate Costs

We rely on significant quantities of substrate materials that provide proteins, fats, and carbohydrates that enhance the biological process in our digesters. Notwithstanding any supply agreements we may have, we are currently unable to forecast the costs associated with transporting substrate, and are exposed to market risk relating to availability of these materials. Substrate availability is affected by industry supply and demand, including competition by other users and recyclers of these materials, weather, and many other factors. In addition, if we are unable to meet the delivery requirements of our suppliers on a regular basis, we risk losing these sources of substrate. Fluctuations in the availability of substrate and the cost to transport it to our projects are expected and could have a materially adverse effect on the profitability of our facilities. In the absence of substrate of sufficient quality at an affordable cost, our anaerobic digester facilities would operate less efficiently, which would materially and adversely affect our overall profitability. A substantial portion of the gas production of Microgy s facilities is derived from the co-digestion contribution enabled by substrate. We are aggressively pursuing efforts to secure reliable substrate supplies on cost effective terms for projects.

#### **Byproduct Management**

Our operations generate significant quantities of solid and liquid byproducts that are marketable. The solids have value as a soil amendment and with further processing may have other commercial applications, including as a replacement for peat moss and as a building material. Our liquids, in addition to being a source of irrigation water to adjacent landowners, may also be utilized as a fertilizer by neighboring farms as the liquids contain basic nutrients that contribute to plant growth. We continue to engage in market development for both forms of byproducts within existing regulatory frameworks. For example, we are authorized to distribute our liquid byproduct in Texas pursuant to a commercial fertilizer license issued by the Texas State Chemist. Neighboring properties interested in the use of our liquid byproduct as a fertilizer are expected to apply it responsibly, at agronomic rates. There are times when a customer has to curtail use of our liquid byproduct to prevent over-application, thereby necessitating that we find other outlets for the byproduct, potentially increasing operating costs, including provision for interim storage. Compliance with these and other applicable regulations and permitting requirements could delay the development of facilities and/or add to our operating costs on an interim or permanent basis and harm our financial condition or potentially require that we discontinue operations, depending upon the severity of any land-application restrictions.

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#### Item 8. Financial Statements and Supplementary Data

The consolidated financial statements, the notes thereto and the reports thereon of Caturano and Company, P.C., an independent registered public accounting firm, required hereunder with respect to Environmental Power Corporation and its consolidated subsidiaries are included in this report on pages 51 through 83 and are incorporated herein by reference.

#### Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

There have been no disagreements with our independent auditors on accounting and financial disclosure matters.

#### Item 9A(T). Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2009. The term disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by the company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. While our disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only such reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of December 31, 2009, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

#### Report of Management on Internal Control over Financial Reporting

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In connection with management s assessment of the effectiveness of internal control over financial reporting in connection with the preparation and filing of our Annual Report on Form 10-K for the year ended December 31, 2009, management, including our chief executive officer and chief financial officer, concluded that our internal control over financial reporting was effective at the reasonable assurance level as of December 31, 2009.

#### Item 9B. Other Information

We held our Annual Meeting of Stockholders on December 29, 2009. At the Annual Meeting, our stockholders elected a Board of Directors to serve for the ensuing year until their respective successors have been duly elected and qualified. The results of the voting were as follows:

Elected as a Director	Number of Shares Voted in Favor	Number of Shares Withheld
Roger S. Ballentine	11,819,925	2,029,213
John R. Cooper	11,827,327	2,021,812
Joseph E. Cresci	10,269,213	3,579,927
Lon Hatamiya	12,868,757	980,281
Richard E. Kessel	12,983,870	865,269
Steven Kessner	11,827,935	2,021,204
August Schumacher, Jr.	12,989,996	865,142
Kamlesh R. Tejwani	9,020,538	4,828,601
Robert I. Weisberg	9,100,521	4,748,619

In addition, our stockholders acted upon and approved the following item by the following vote:

		Votes		Broker
Item	Votes For	Against	Abstained	Non-Votes
The ratification of our board of directors selection of Caturano				
and Company, P.C. as our Independent auditors for the fiscal year				
ending December 31, 2009.	13,587,845	235,966	25,328	0

#### PART III

# Item 10. Directors and Executive Officers and Corporate Governance Directors and Executive Officers

Information regarding our directors may be found under the caption Election of Directors in the Proxy Statement for our 2010 Annual Meeting of Stockholders. Information regarding our executive officers may be found under the caption Executive Officers of the Registrant appearing at the end of Part I of this annual report on Form 10-K. Such information is incorporated herein by reference.

#### **Audit Committee**

We have a separately designated standing Audit Committee established in accordance with Section 3(a) (58) (A) of the Exchange Act.

Additional information regarding the Audit Committee may be found under the captions Corporate Governance Board Committees Audit Committee and Corporate Governance Report of the Audit Committee in the Proxy Statement for our 2010 Annual Meeting of Stockholders. Such information is incorporated herein by reference.

#### **Audit Committee Financial Expert**

The Board of Directors has designated John R. Cooper as the Audit Committee Financial Expert as defined by Item 401(h) of Regulation S-K of the Exchange Act and determined that he is independent within the meaning of Item 7(d)(3)(iv) of Schedule 14A of the Exchange Act.

#### **Director Nominees**

Information regarding procedures for recommending nominees to the Board of Directors may be found under the caption Corporate Governance Director Candidates in the Proxy Statement for our 2010 Annual Meeting of Stockholders. Such information is incorporated herein by reference.

#### Section 16(a) Beneficial Ownership Reporting Compliance

Information regarding Section 16(a) Beneficial Ownership Reporting Compliance may be found under the caption Stock Ownership Information Section 16(a) Beneficial Ownership Reporting Compliance in the Proxy Statement for our 2010 Annual Meeting of Stockholders. Such information is incorporated herein by reference.

#### **Code of Ethics**

We have adopted a code of business conduct and ethics that applies to our directors, officers (including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions) as well as our employees. A copy of our code of business conduct and ethics is available on our website at www.environmentalpower.com under Investor Relations Corporate Governance . We intend to post on our website all disclosures that are required by applicable law, the rules of the Securities and Exchange Commission or Nasdaq listing standards concerning any amendment to, or waiver from, our code of business conduct and ethics.

#### Item 11. Executive Compensation

Information with respect to this item may be found under the caption Information about Executive and Director Compensation in the Proxy Statement for our 2010 Annual Meeting of Stockholders. Such information is incorporated herein by reference.

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#### Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information with respect to this item may be found under the caption Stock Ownership Information and Securities Authorized for Issuance under Equity Compensation Plans in the Proxy Statement for our 2010 Annual Meeting of Stockholders. Such information is incorporated herein by reference.

#### Item 13. Certain Relationships and Related Transactions

Information with respect to this item may be found under the caption Corporate Governance Certain Relationships and Related Transactions in the Proxy Statement for our 2010 Annual Meeting of Stockholders. Such information is incorporated herein by reference.

#### Item 14. Principal Accountant Fees and Services

Information with respect to this item may be found under the caption Corporate Governance Registered Public Accounting Firm s Fees in the Proxy Statement for our 2010 Annual Meeting of Stockholders. Such information is incorporated herein by reference.

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#### **PART IV**

# Item 15. Exhibits and Financial Statement Schedules (a)(1) Financial Statements.

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(a)(2) List of Exhibits.	

The list of Exhibits filed as a part of this annual report on Form 10-K are set forth on the Exhibit Index appearing immediately following the signatures to this report, and is incorporated herein by this reference.

#### Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of

**Environmental Power Corporation:** 

We have audited the accompanying consolidated balance sheets of Environmental Power Corporation and subsidiaries (the Company) as of December 31, 2009 and 2008, and the related consolidated statements of operations, cash flows and changes in shareholders equity (deficit), for each of the years ended December 31, 2009, 2008 and 2007. These consolidated financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purposes of expressing an opinion on the effectiveness of the Company s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Environmental Power Corporation and subsidiaries as of December 31, 2009 and 2008, and the consolidated results of their operations and their cash flows for each of the years ended December 31, 2009, 2008 and 2007, in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note A to the consolidated financial statements, the Company s recurring losses from operations, its need to raise substantial additional capital and its current cash balance relative to obligations, contractual commitments, and corporate overhead requirements raise substantial doubt about its ability to continue as a going concern. Management s plans concerning these matters are also discussed in Note A to the consolidated financial statements. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

As discussed in Note L to the financial statements, the Company changed the manner in which it accounts for certain warrants effective January 1, 2009.

/s/ Caturano and Company, P.C.

Boston, Massachusetts

March 30, 2010

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### Environmental Power Corporation and Subsidiaries

#### **Consolidated Balance Sheets**

	De	cember 31, 2009	December 31, 2008		
ASSETS					
Current Assets					
Cash and cash equivalents	\$	662,766	\$	3,157,938	
Restricted cash		1,792,127		104,577,246	
Receivables, net of allowance of \$0 and \$34,042 at December 31, 2009 and 2008,					
respectively		533,964		373,039	
Other current assets		304,634		60,210	
Total Current Assets		3,293,491		108,168,433	
Restricted cash, non current		262,843		553,014	
Property, plant, and equipment, net		25,125,586		23,932,073	
Construction in progress		9,026,224		20,101,314	
Licensed technology rights, net		2,143,796		2,329,296	
Notes receivable, net		1,514,896		1,608,500	
Deferred financing costs, net		932,530		5,122,995	
Other assets		447,953		197,569	
TOTAL ASSETS	\$	42,747,319	\$	162,013,194	
LIABILITIES AND SHAREHOLDERS EQUITY (DEFICIT)					
Current Liabilities					
Accounts payable and accrued expenses	\$	5,323,731	\$	4,322,996	
Current portion of long-term debt	Ť	46,464,223	Ť	1,0 ==,,,,	
T. 10 11111		<b>54 505 054</b>		4 222 006	
Total Current Liabilities		51,787,954		4,322,996	
Other liabilities		282,434		340,706	
Long-term debt		1,432		129,475,023	
Total Liabilities		52,071,820		134,138,725	
Preferred stock(1)		10,156,021		10,156,021	
Shareholders Equity (Deficit)					
Preferred stock(2)		100		100	
Common stock(3)		158,030		157,030	
Additional paid in capital		86,509,898		89,986,923	
Accumulated deficit		(105,121,923)		(71,401,984)	
Treasury stock(4)		(388,408)		(385,402)	
Notes receivable from current directors and a former officer and director		(638,219)		(638,219)	
Total Shareholders Equity (Deficit)		(19,480,522)		17,718,448	
TOTAL LIABILITIES AND SHAREHOLDERS EQUITY (DEFICIT)	\$	42,747,319	\$	162,013,194	

<sup>(1)</sup> Preferred stock, \$.01 par value, 2,000,000 shares authorized; 281,241 shares issued as of December 31, 2009 and 2008. Stated value at December 31, 2009 and 2008 of \$52.71 per share or \$14,824,213.

- (2) Preferred stock of subsidiary, no par value, 10 shares authorized; 10 shares issued as of December 31, 2009 and 2008, respectively.
- (3) \$.01 par value; 50,000,000 shares authorized; 15,803,034 issued and 15,708,591 outstanding as of December 31, 2009; 50,000,000 shares authorized; 15,703,034 issued and 15,614,604 outstanding as of December 31, 2008.
- (4) 94,443 shares at cost as of December 31, 2009 and 88,430 shares at cost as of December 31, 2008. See Notes to Consolidated Financial Statements.

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### Environmental Power Corporation and Subsidiaries

### **Consolidated Statements of Operations**

	December 31, 2009	, , , , , , , , , , , , , , , , , , ,	
REVENUES	\$ 4,711,447	\$ 2,905,038	\$ 1,174,947
COSTS AND EXPENSES			
Operations and maintenance	3,606,882	7,118,033	941,991
Impairment of assets	26,070,440	4,912,866	
General and administrative	6,408,403	12,003,092	12,443,605
Depreciation and amortization	1,540,509	1,359,097	304,331
TOTAL COSTS AND EXPENSES	37,626,234	25,393,088	13,689,927
OPERATING LOSS	(32,914,787)	(22,488,050)	(12,514,980)
OTHER INCOME (EXPENSE)			
Interest income	42,264	486,986	782,566
Interest expense	(3,344,412)	(968,684)	(11,599)
Other income	133,878		583,616
TOTAL OTHER INCOME (EXPENSE)	(3,168,270)	(481,698)	1,354,583
NET LOSS BEFORE INCOME TAXES	(36,083,057)	(22,969,748)	(11,160,397)
INCOME TAX EXPENSE	29,294	26,284	900
	ĺ		
NET LOSS FROM CONTINUING OPERATIONS	(36,112,351)	(22,996,032)	(11,161,297)
NET LOSS FROM DISCONTINUED OPERATIONS, NET OF TAXES OF \$0	(00,112,001)	(1,010,534)	(6,195,852)
GAIN ON DISPOSAL OF DISCONTINUED OPERATIONS, NET OF TAXES OF \$0		7,999,858	(0,272,022)
		. , ,	
NET LOSS	(36,112,351)	(16,006,708)	(17,357,149)
Preferred Securities Dividend Requirements	(1,334,179)	(1,326,271)	(1,348,343)
Beneficial Conversion Feature of Preferred Stock	(1,00 1,117)	(1,020,271)	(57,148)
Change in Value of Modified Warrants			(97,404)
			(21,101)
NET LOSS APPLICABLE TO COMMON SHAREHOLDERS	\$ (37,446,530)	\$ (17,332,979)	\$ (18,860,044)
NET LOSS ATTLICABLE TO COMMON SHAKEHOLDERS	Ψ (37,770,330)	ψ (17,332,373)	ψ (10,000,044)
Weighted Average Common Shares Outstanding Basic & Diluted	15,587,117	15,579,354	11,338,973
Net Loss Per Common Share from Continuing Operations Basic & Diluted	\$ (2.40)	\$ (1.56)	\$ (1.12)
Net Loss Per Common Share from Discontinued Operations Basic & Diluted  Net Income (Loss) Per Common Share from Discontinued Operations Basic & Diluted	φ (2.40)	0.45	(0.54)
Net Loss Per Common Share Basic & Diluted	(2.40)	(1.11)	(1.66)

See Notes to Consolidated Financial Statements.

### Environmental Power Corporation and Subsidiaries

### **Consolidated Statements of Cash Flows**

	December 31, 2009	Years Ended December 31, 2008	December 31, 2007
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	\$ (36,112,351)	\$ (16,006,708)	\$ (17,357,149)
Net loss from discontinued operations		1,010,534	6,195,852
Net gain on sale of discontinued operations		(7,999,858)	
Non-cash adjustments			
Impairment of assets	26,070,440	4,912,866	
Depreciation and amortization	1,540,509	1,386,529	468,923
Non-cash, stock based compensation expense	417,943	1,950,987	2,798,032
Amortization of deferred financing costs	157,147		
Non-cash income from adjustment to fair value of warrants	(161,001)		
Changes in operating assets and liabilities:	` ′ ′		
(Increase) decrease in receivables	(160,925)	236,851	(409,396)
Increase in other current assets	(244,424)	,	(190,757)
(Decrease) increase in accounts payable and accrued expenses	302,970	2,065,627	(1,183,520)
Net cash used in operating activities in continuing operations	(8,189,692)	(12,443,172)	(9,678,015)
CASH FLOWS FROM INVESTING ACTIVITIES:			
(Increase) decrease in restricted cash	103,075,290	(58,856,081)	5,969,531
Construction of projects	(9,480,774)	(17,531,218)	(12,388,225)
Purchase of property, plant and equipment	(265,907)	(376,529)	(82,843)
Purchase of treasury stock	(3,006)		
Decrease in notes receivable	93,604	233,240	75,964
(Increase) decrease in other assets	(250,384)	101,858	(84,230)
Net cash provided by (used in) investing activities in continuing operations	93,168,823	(76,428,730)	(6,509,803)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from issuance of long-term debt	5,000,000	69,425,000	
Sale of preferred and common stock	· · ·	•	26,642,914
Exercise of stock options			2,951,784
Payments on long-term debt	(91,009,368)	(53,960)	(260,960)
Dividend payments on preferred stock	(667,090)	(1,326,271)	(871,058)
Increase in deferred financing costs	(733,197)	(2,580,349)	(11 )111/
(Decrease) increase in other liabilities	(64,648)	136,222	
Payment of dividend on behalf of subsidiary	(- )	(15,000)	
Net cash provided by (used in) financing activities in continuing operations	(87,474,303)	65,585,642	28,462,680
Net increase (decrease) in cash and cash equivalents from continuing operations	(2,495,172)	(23,286,260)	12,274,862
CASH FLOW FROM DISCONTINUED OPERATIONS:			
Net cash provided by (used) in operating activities of discontinued operations		(1,235,745)	1,560,530
Net cash provided by investing activities of discontinued operations		3,083,745	745,715
Net cash used in financing activities of discontinued operations		(1,473,000)	(2,306,000)
Net increase (decrease) in cash and cash equivalents from discontinued operations		375,000	245
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(2,495,172)	(22,911,260)	12,275,107
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	3,157,938	26,069,198	13,794,091

CASH AND CASH EQUIVALENTS, END OF YEAR \$ 662,766 \$ 3,157,938 \$ 26,069,198

Supplemental Disclosure of Cash Flow Information			
Cash paid during the year for			
Interest (net of amount capitalized)	\$ 2,463,874	\$ 881,175	\$ 11,599
Income Taxes	29,294	26,284	900
Non-cash investing and financing activity			
Payment of license fees with issuance of 14% convertible note	3,000,000		
Accrued dividend requirement of Series A preferred stock	1,334,179	667,090	667,890
Capitalized amortization of deferred financing costs	130,257	96,341	88,955
Warrant capitalized in construction in progress			(907,289)
Change in value of modified warrants			(97.404)

See Notes to Consolidated Financial Statements.

### **Environmental Power Corporation and Subsidiaries**

### Consolidated Statements of Shareholders Equity

	Preferred Stock - Shares	Preferred Stock - Amount	Common Stock - Shares	Common Stock - Amount	Additional Paid-in Capital	Accum. Deficit	Treasury Stock - Shares	Treasury Stock - Amount	Note-Receivable from Current Directors & Former Officer	Total
Balance at										
December 31,										
2006	100	100	9,740,455	97,404	54,640,990	(35,193,961)	88,430	(385,402)	(638,219)	18,520,912
Dividends on										
preferred stock						(1,348,343)				(1,348,343)
Stock based										
compensation										
expense					3,705,322					3,705,322
Exercise of										
stock options			527,329	5,273	2,946,512					2,951,785
Sale of										
common stock			5,400,000	54,000	26,588,913					26,642,913
Beneficial										
conversion										
feature of										
preferred stock					57,148	(57,148)				
Modification of										
Warrants					97,404	(97,404)				
Net loss						(17,357,149)				(17,357,149)
Balance at										
December 31,										
2007	100	100	15,667,784	156,677	88,036,289	(54,054,005)	88,430	(385,402)	(638,219)	33,115,440
Dividends on			, ,		, ,			, , ,		, ,
preferred stock						(1,326,271)				(1,326,271)
Dividend paid										
on behalf of										
subsidiary						(15,000)				(15,000)
Stock based						, , ,				` , , ,
compensation										
expense					1,950,987					1,950,987
Issuance of										
restricted stock			35,250	353	(353)					
Net loss			ĺ		,	(16,006,708)				(16,006,708)
						, -,				
Balance at										
December 31,										
2008	100	100	15,703,034	157.030	89,986,923	(71,401,984)	88.430	(385,402)	(638,219)	17,718,448
Reclassification	100	200	20,700,001	10.,000	0,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(12,102,501)	00,100	(000,102)	(000,215)	17,710,710
of equity-linked										
financial										
instrument					(3,893,968)	3,726,591				(167,377)
Dividends on					(2,0,2,,00)	2,,20,271				(20.,0.1)
preferred stock						(1,334,179)				(1,334,179)
Dividend paid						(1,00 1,17)				(1,00 1,177)
on behalf of										
subsidiary					417,943					417,943
					, ,					

Issuance of restricted stock	100,000	1,000	(1,000)			
Purchase of						
treasury stock				6,013	(3,006)	(3,006)
Net loss			(36,112,351)			(36,112,351